

Atlantic States Marine Fisheries Commission

Atlantic Menhaden Management Board

May 15, 2014
9:45 a.m. – 12:45 p.m.
Alexandria, Virginia

Draft Agenda

The times listed are approximate; the order in which these items will be taken is subject to change; other items may be added as necessary.

- | | |
|--|------------|
| 1. Welcome/Call to Order (<i>R. Boyles</i>) | 9:45 a.m. |
| 2. Board Consent | 9:45 a.m. |
| • Approval of Agenda | |
| • Approval of Proceedings from February 2014 | |
| 3. Public Comment | 9:50 a.m. |
| 4. Consider 2014 FMP Review and State Compliance (<i>M. Waine</i>) Action | 10:00 a.m. |
| 5. Review 2013 Bycatch Landings (<i>M. Waine</i>) Possible Action | 10:30 a.m. |
| 6. Technical Committee Report (<i>G. Nessler</i>) | 12:25 p.m. |
| • Benchmark Stock Assessment Progress Report | |
| 7. Review and Populate Advisory Panel Membership (<i>M. Waine</i>) Action | 12:40 p.m. |
| 8. Elect Vice-Chair (<i>R. Boyles</i>) Action | 12:45 p.m. |
| 9. Other Business/Adjourn | 12:45 p.m. |

The meeting will be held at the Crown Plaza, 901 North Fairfax Street, Alexandria, VA 22314; 703-683-6000

MEETING OVERVIEW

Atlantic Menhaden Management Board Meeting
Thursday, May 15, 2014
9:45 a.m. – 12:45 p.m.
Alexandria, Virginia

Chair: Robert Boyles Jr. (NC) Assumed Chairmanship: 8/13	Technical Committee Chair: Micah Dean (MA)	Law Enforcement Committee Representative: Lloyd Ingerson (MD)
Vice Chair: Vacant	Advisory Panel Chair: Jeff Kaelin (NJ)	Previous Board Meeting: February 5, 2014
Voting Members: ME, NH, MA, RI, CT, NY, NJ, DE, MD, PRFC, VA, NC, SC, GA, FL, NMFS, USFWS (17 votes)		

2. Board Consent

- Approval of Agenda
- Approval of Proceedings from February 2014

3. Public Comment – At the beginning of the meeting public comment will be taken on items not on the agenda. Individuals that wish to speak at this time must sign-in at the beginning of the meeting. For agenda items that have already gone out for public hearing and/or have had a public comment period that has closed, the Board Chair may determine that additional public comment will not provide additional information. In this circumstance the Chair will not allow additional public comment on an issue. For agenda items that the public has not had a chance to provide input, the Board Chair may allow limited opportunity for comment. The Board Chair has the discretion to limit the number of speakers and/or the length of each comment.

4. Consider 2014 FMP Review and State Compliance (10:00 – 10:30 a.m.) Action
Background <ul style="list-style-type: none">• State Compliance Reports are due on April 1 (Briefing Materials)• The Plan Review Team reviewed each state report and drafted the 2014 FMP Review (Supplemental Materials)
Presentations <ul style="list-style-type: none">• Overview of the 2014 Fishery Management Plan Review by M. Waine
Board actions for consideration at this meeting <ul style="list-style-type: none">• Accept the 2014 Fishery Management Plan Review

5. Review 2013 Bycatch Landings (10:30 a.m. – 12:25 p.m.) Possible Action
Background <ul style="list-style-type: none">• At its February 2014 meeting, the Board requested information on the 2013 bycatch landings. The Plan Review Team completed an analysis of the 2013 bycatch landings which is included in the 2014 FMP Review. (Supplemental Materials).
Presentations <ul style="list-style-type: none">• Overview of 2013 Bycatch Landings by M. Waine

6. Technical Committee Report (12:25 – 12:40 p.m.)

Background

- The Board requested quarterly progress reports on the upcoming Benchmark Stock Assessment for Atlantic menhaden, currently scheduled for 2014 (**Briefing Materials**).

Presentations

- Benchmark Stock Assessment Progress Report by G. Nesslage

7. Review and Populate Advisory Panel Membership (12:40 p.m.) Action

Background

- The Board will review advisory panel nominations (**Supplemental Material**)

Presentations

Nominations by M. Waine

Board actions for consideration at this meeting
--

- Approve advisory panel nominations

8. Elect Vice Chair (12:45 p.m.) Action
--

Background

- The vice chair seat for the Atlantic Menhaden Management Board is currently vacant.

Board actions for consideration at this meeting
--

- Elect Vice Chair

9. Other Business/Adjourn

**DRAFT PROCEEDINGS OF THE
ATLANTIC STATES MARINE FISHERIES COMMISSION
ATLANTIC MENHADEN MANAGEMENT BOARD**

**Crowne Plaza - Old Town
Alexandria, Virginia
February 5, 2014**

**These minutes are draft and subject to approval by the Atlantic Menhaden Management Board.
The Board will review the minutes during its next meeting.**

TABLE OF CONTENTS

Call to Order, Chairman Robert H. Boyles, Jr1

Approval of Agenda.....1

Approval of Proceedings, October 20131

Public Comment.....1

Florida’s Alternative Management Proposal2

Overview2

Technical Committee Report3

Discussion of the Florida Proposal3

Compliance Report Components for the 2013 Fishing Year20

Technical Committee Report20

Other Business.....24

Adjournment25

INDEX OF MOTIONS

1. **Approval of Agenda** by consent (Page 1).
2. **Approval of Proceedings of October, 2013** by consent (Page 1).
3. **Move to manage cast net fisheries for menhaden under the bycatch allowance with the state bearing responsibility for reporting** (Page 5). Motion by Tom Fote; second by Jim Gilmore. Motion amended.
4. **Move to substitute to develop an addendum that would allow cast net fisheries for menhaden, subject to trip limits and exempt from state quotas, with states bearing the responsibility for reporting cast net fishery catch** (Page 8). Motion by David Pierce; second by Rep. Kumiega. Motion failed (Page 15).
5. **Friendly amendment to amend to add in for 2014 and 2015 in the original motion** (Page 15). Motion by David Borden; second by Russ Allen. Motion Carried (Page 15).
6. **Move to amend to add “for the state of Florida” after “menhaden” in the original motion** (Page 18). Motion by Ritchie White; second by David Simpson. Motion fails (Page 19).
7. **(Main Motion as Amended): Motion to manage cast net fisheries for menhaden under the bycatch allowance for 2014 and 2015, with the states bearing responsibility for reporting** Motion carried (Page 23).
8. **Move to adjourn by consent** (Page 25).

Draft Proceedings of the Atlantic Menhaden Management Board Meeting February 2014

ATTENDANCE

Board Members

Terry Stockwell, ME, proxy for P. Keliher (AA)	John Clark, DE, proxy for D. Saveikis (AA)
Steve Train, ME (GA)	Roy Miller, DE (GA)
Rep. Walter Kumiega, ME (LA)	Bernie Pankowski, DE, proxy for Sen. Venables (LA)
Dennis Abbott, NH, proxy for Sen. Watters (LA)	Lynn Fegley, MD, proxy for T. O'Connell (AA)
Doug Grout, NH (AA)	Bill Goldsborough, MD (GA)
G. Ritchie White, NH (GA)	Russell Dize, MD, proxy for Sen. Colburn (LA)
Jocelyn Cary, MA, proxy for Rep. Peake (LA)	Rob O'Reilly, VA, proxy for J. Bull (AA)
David Pierce, MA, proxy for P. Diodati (AA)	Kyle Schick, VA, proxy for Sen. Stuart (LA)
Bill Adler, MA (GA)	Louis Daniel, NC (AA)
Robert Ballou, RI (AA)	Bill Cole, NC (GA)
Rick Bellavance, RI, proxy for Sen. Sosnowski (LA)	Robert Boyles, Jr., SC (AA)
David Borden, RI, proxy for B. McElroy (GA)	Ross Self, SC, Administrative proxy
David Simpson, CT (AA)	Spud Woodward, GA (AA)
Dr. Lance Stewart, CT (GA)	Patrick Geer, GA, proxy for Rep. Burns (LA)
James Gilmore, NY (AA)	Jim Estes, FL, proxy for J. McCawley (AA)
Pat Augustine, NY (GA)	Martin Gary, PRFC
Tom Fote, NJ (GA)	Steve Meyers, NMFS
Russ Allen, NJ, proxy for D. Chanda (AA)	Mike Millard, USFWS

(AA = Administrative Appointee; GA = Governor Appointee; LA = Legislative Appointee)

Ex-Officio Members

Staff

Robert Beal	Genny Nesslage
Toni Kerns	Mike Waive

Guests

Kelly Denit, NOAA	Mike Smith, MSSA
Kevin Chu, NOAA	Jimmy Kellum, Kellum Maritime
Loren Lustig, ASMFC Gov. Appt. PA	Bob Vanasse, Saving Seafood
Raymond Kane, CHOIR	Rob O'Reilly, VA MRC
Patrick Paquette, MA Striped Bass Assn.	Ken Hastings, Stripers Forever
Jeff Kaelin, Lund's Fisheries	Arnold Leo, East Hampton, NY
Charles Lynch, NOAA	Brett Scholtes, Omega Protein, Houston
Joseph Gordon, PEW Trusts	Monty Deihl, Omega Protein
Katharine Deuel, Pew Trusts	Benson Chiles, Chiles Consulting
Aaron Kornbluth, Pew Trusts	Jeffrey Pierce, Alewife Harvesters, ME
Chris Moore, CBF	Nicole Bransome, Univ. of MD
Vince Ringgold, MSSA	

Draft of the Atlantic Menhaden Management Board Meeting Proceedings February 2014

The Atlantic Menhaden Management Board of the Atlantic States Marine Fisheries Commission convened in the Presidential Ballroom of the Crown Plaza Hotel Old Town, Alexandria, Virginia, February 5, 2014, and was called to order at 10:25 o'clock a.m. by Chairman Robert H. Boyles, Jr.

CALL TO ORDER

CHAIRMAN ROBERT H. BOYLES, JR.: Good morning, everyone. I would like to call to order the winter meeting of the Menhaden Management Board.

APPROVAL OF AGENDA

CHAIRMAN BOYLES: The first item on the agenda is seeking consent on the agenda that was distributed as part of the briefing materials. Are there any additions or changes to the agenda? Seeing none, the agenda will be adopted by consent.

APPROVAL OF PROCEEDINGS

CHAIRMAN BOYLES: The second item is approval of the proceedings from our October meeting at the annual meeting down in St. Simons. Again, the proceedings were distributed as part of the Briefing CD. Are there any additions or edits to the proceedings? I see none, so the proceedings will be adopted by consent.

PUBLIC COMMENT

CHAIRMAN BOYLES: The next item on the agenda is for public comment for those items that are not on the agenda. We've had one person indicate an interest to make public comments to the board; so I will call on Ken Hastings to come to the public microphone.

MR. KEN HASTINGS: My name is Ken Hastings. I am a recreational fisherman from Maryland. I am a Stripers Forever Board Member, but I would like it in the record that I'm representing myself right now. My comments are personal and I do not know if Stripers Forever would approve or not.

I attended the Georgia meeting. I am very interested in menhaden. I have been following this subject for a long time. I even went to the Baltimore meeting where people held the signs up and went around and created a lot of hate and distrust and whatnot. I was not holding a sign. I would have been, but it was so crowded I couldn't stand up.

At the Georgia meeting, when I got there I had an idea in mind of something that I wanted to say, and I wanted to talk about catch accountability for menhaden, because I don't believe we have a clue. But that was just me based on my knowledge of one limited state. Before I got a chance to do that, members of this board asked for that agenda to be modified so they could discuss their issues, which happened to parallel mine.

Man, this is like something crazy; this never happens to me. They had issues of accountability; the 6,000 pound bycatch allowance and the 12,000 pound bycatch allowance. All these things were discussed at great length as part of the Georgia meeting. There was general consensus, since we're on consensus mode, that this would become a prime item for the February meeting here. At the end, just to make sure that everything went right and according to the minutes, you see you've already approved the agenda and no one has objected to your agenda.

You've also approved the proceedings from the Georgia meeting and no one had any additions. However, I read the proceedings. I was there and didn't have to do that, but at 72 I forget things so I went back and I reviewed the minutes. This gentleman here does an excellent job with that. Here is what I found out at the end.

It was Chairman Boyles saying this; "I'll look to the administrative commissioners to take the lead to ensure that we get that so that we have an informed discussion in February. I look forward to a vibrant

Draft of the Atlantic Menhaden Management Board Meeting Proceedings February 2014

discussion in February. We will put some time aside in February for spirited discussions.”

At that point – and having reviewed this in the minutes – I have come to the conclusion that a significant number of states felt that, number one, they don’t know how many fish they were catching before the 20 percent cut was put in place. Number 2, they don’t know how many they’re catching now. Number 3, they’re probably exceeding their share of the coast-wide TAC.

Now, I feel that these are significant issues. I saw a commitment I thought from this commission to go down that road; and I’m sitting here thinking I missed something. Some major event has happened here that has escaped me. It doesn’t matter how hard I look, it happens. I miss things, okay. I would like to know do you have a get-well plan?

I think as a member of the tax-paying public and a fisherman, I want to know. I want a better outcome to report back to Stripers Forever when this is all over with. I would like to know do you have a plan? This is February and we said we were going to do this at the February meeting. I think we’re there; so at what point do we plan to cover this? Thank you.

CHAIRMAN BOYLES: Thank you, Mr. Hastings, and I’ll speak to that. Your chairman misled the board, so I’ll apologize to everyone up front; and that is the fact that our landings and our compliance reports are not due until April. We don’t have landings data to be able to inform that. I appreciate your comments, Mr. Hastings, but I believe that is where we find ourselves; and we look forward to state directors submitting landing reports according to the compliance schedule. I misspoke at October, so thank you.

MR. HASTINGS: Okay; and I understand that and I appreciate that. I know there is a lag here; and we haven’t done this before and there are lots that need to be done. I can predict for you what is going to be on those compliance reports. Everyone is going to be in compliance because the system is set up to make sure that happens

on paper. It has absolutely nothing to do with what was actually caught and taken out of the system. I know you’re going to have us talk here on the compliance, but it is only going to be a half hour. You’re not going to cover all these things. You’re not going to take any action. Thank you.

CHAIRMAN BOYLES: Is there any other public comment? Okay, moving on, we will go now to Mike Waine and Florida’s Alternative Management Proposal.

FLORIDA’S ALTERNATIVE MANAGEMENT PROPOSAL

OVERVIEW

MR. MICHAEL WAINE: This proposal was submitted back in late 2013; and due to the timing, we weren’t able to get to this at the October meeting. We have since brought this back to the technical committee and had them take a look at it. First I’m going to go through their alternative management proposal. Then I’ll take a break and stop and let Jim add anything if he has anything to add then go through the technical report after that.

Just as overview, Amendment 2 was implemented in January 2013; and that, as many are aware, implemented quota management for the first time for the menhaden fishery. The amendment provides flexibility for alternative management proposals to be reviewed if they are deemed conservation equivalent.

A little background on this issue; Florida in 1995 implemented a net ban which prohibited the use of gill nets in state waters. They also at the same time limited all of their nets to no greater than 500 square feet of mesh area in state waters, which effectively made their menhaden fishery a cast net fishery. They also implemented cast nets can be no greater than 14 feet.

However, there are some reporting issues that occurred as we’ve heard about from

Draft of the Atlantic Menhaden Management Board Meeting Proceedings February 2014

some other states as well; so an estimated three-quarters of the commercial landings have gone unreported, however, even though the law states that any commercial sale must be reported. Those unreported landings extend back prior to the net ban; they have been consistent over time.

Industry has been alerted that they need to report bait landings moving forward. Florida identified several needs for conservation equivalency. Florida fishers have already endured significant reduction from the net ban. Florida harvest provides bait to other important fisheries. Their harvest has been reduced significantly through time.

Menhaden remains sustainable because of their current gear restrictions. The management of a quota based on inaccurate reporting will result in an early closure of the fishery as reporting improves. Their request is that current gear limitations, as I've talked about, are a more conservative and effective approach to management than the current strategy of decreasing mortality through the use of a quota; and, therefore, Florida is requesting to be exempt from their state's quota, which is up there as roughly 67,000 pounds.

This is the supporting data that Florida provided. The figure shows landings through time. From 1986 through 1994 they averaged 2.7 million pounds in landings. Since that net ban, which was in 1995, landings have averaged 152,000 pounds, which represents a 94 percent decrease with the level of reporting was assumed to be constant. I will pause there. That is their proposal; and we take questions, I can go through the technical committee report.

CHAIRMAN BOYLES: Are there questions for Mike? Mike, I see questions; go on to the technical committee report, please.

TECHNICAL COMMITTEE REPORT

MR. WAINE: The technical committee reviewed this proposal and they had a few recommendations and thoughts on it. First, the reference period for setting the quota was 2009 through 2011; and that timeframe already

incorporates conservation measures that are cited by Florida's proposal.

Second, the decrease in landings since the 1995 net ban may have other causes as other states have seen a decrease in landings as well. Other states implemented conservation measures prior to the allocation period; so there is the potential for other conservation equivalent proposals to arise. The scale of landings in Florida alone is not biologically harmful; but if states with equivalent harvest to Florida file for conservation equivalency, the impact could compound significantly.

It is difficult to fully evaluate conservation equivalency without knowing the species differentiation of landings in Florida. Florida has a yellowfin menhaden that is harvested on the Atlantic Coast as well; and they look quite similar and the industry has trouble identifying – excuse me, when they are reported, they are not reported separately as they often commingle and catch them together.

The technical committee felt it important to know what the breakdown in landings between those two species were in order to fully get an account of Florida's landings for Atlantic menhaden. If Florida does not have a quota, there is the potential for other states to land menhaden in the state of Florida. Ultimately, the technical committee concluded from a biological standpoint the conservation equivalency principle cannot be applied to Florida's case because the net ban was instituted by Florida well before the period used to set the Amendment 2 quotas.

CHAIRMAN BOYLES: Are there questions for Mike on the technical committee's report?

DISCUSSION OF THE FLORIDA PROPOSAL

MR. ROB O'REILLY: Would a couple of comments be all right? Okay, I guess one comment is I understand the situation where by virtue of the net ban that harvesters have

Draft of the Atlantic Menhaden Management Board Meeting Proceedings February 2014

less to land than they did prior. In a similar situation, though, I think Virginia outlawed trawling in 1989. I can remember with the weakfish management plan we pled our case that getting rid of trawling was a very significant issue for us and also very beneficial for weakfish and other species in state waters.

At that time the determination is the same as this technical committee has said to Florida, which is there is a status of the stock now and what occurred before is really not part of this status of the stock. Although I understand the position, I think that is what we have to go by. The second idea here is that I wasn't sure in reading through Florida's information what would be the vehicle for getting better landings' information.

It is mentioned in the letter that harvesters have committed to begin reporting bait landings. I know that in most cases it is the buyer who can do the best reporting. For the Eel Plan we currently are working on there will be complementary harvester and buyer reporting. Also in some states such as Virginia, even though we have a harvester-based reporting, for some species we go to the buyer as well because you need that quality control. I will say that I was left not quite understanding how Florida will get that reporting. Thank you.

CHAIRMAN BOYLES: Jim, do you want to respond to that?

MR. JIM ESTES: Yes, thank you. Our reporting in Florida is done like it is in many other states; and it is reported by the wholesale dealer. We have the harvester who must sell to a wholesale dealer; and the wholesaler dealer can sell to a retailer or be the retailer. In the case of menhaden and other bait fisheries, I suspect, is that harvester was actually retailing and was not going through a wholesale dealer; and so there was a loophole and there was no way to catch them. Since that time there is only a handful of these harvesters that are doing this.

We have talked to them and at least some of them have been reporting to the fact that I think our estimate of three-quarters of the landings have not been reported; now they have been

reported over this last year mostly through the bycatch measure. The reporting has increased. If we have a hundred percent, I don't know.

MR. PATRICK AUGUSTINE: Mr. Chairman, a question does up; you made a statement that the state reports aren't due until April. At the bottom there it says if Florida does not have a quota, there is the potential for other states to land menhaden. I guess when I'm looking at that and I'm saying, gee, if you have Florida landing data as was just described, you are now getting reports on it, could that have an impact on the technical committee's assessment of their proposal? After that one, I have a follow-on question that I think it is a little deeper reaching than that. Mike, could you help me on that?

CHAIRMAN BOYLES: Pat, I'm going to try something a little bit differently, if I can. Are there any other questions on the technical committee, comments or questions for – or comments, rather, for Jim? Jim, remind me for the record; this is a cast net fishery, correct?

MR. ESTES: That is correct; that is the only gear that they use.

CHAIRMAN BOYLES: It is a directed fishery; correct?

MR. ESTES: I would consider it a directed fishery myself.

CHAIRMAN BOYLES: I think where we are; in my state we have a recreational directed cast net fishery for bait. I recall this board having a conversation early on, before the development of this most recent amendment, that we were really, really trying to get the most bang for our buck. I asked staff to do some calculations for me; and I think what we're talking about, reported landings from cast nets in 2012, 245,480 pounds.

Draft of the Atlantic Menhaden Management Board Meeting Proceedings February 2014

That is 0.18 percent of the bait landings that we're talking about. I think the difficulty we have here is the plan calls for this to be apply for a directed fishery; and Jim has indicated that this is in fact a directed fishery. I go back to the situation in my own state where we basically said we're not really concerned about cast nets.

I guess the question I have for the board is, is this really significant enough for us to spend a lot of time to about 0.18 percent of the total catch; recognizing that we do have – as Mr. Hastings pointed out correctly we do have questions about catch reporting and we are trying to provide incentives for anglers to report their catch. The question I have for the board is this something that we can simply deal with under the bycatch fishery? Tom Fote.

MR. THOMAS FOTE: I'm looking at the cast net fishery that goes on in Raritan Bay. A lot of those boats come over from New York; and I've gotten a lot of calls why New York boats are cast netting in – because they buy a permit and they're allowed to do that. They run the fish back to Staten Island.

Where they reported, I don't know; but when you look at the overall catch of all those cast nets and you look at the purse seiners that are operating in Raritan Bay on the Jersey side, it is miniscule in comparison to do; so I'm not going to worry about New York boats that are throwing a cast net and running across, because the other side of that bait fishery is so gigantic. You know, over the years we have all run into the problem where we basically did conservation measures way back when and then we didn't get credit for it.

I think that is wrong and I thought it was wrong when we did it 15 years ago. I thought it was wrong when we wouldn't let Virginia take credit. I thought it was wrong when we couldn't take credit for New Jersey not taking fish in the producing area until they were 28 instead of 18 inches, but the board said that is your problem. I think we really need to look at it, though. We need to understand it; and I have no problem with handling it as a bycatch even though those boats can't handle it as a bycatch in some of the

states as a cast net fishery just because of the size of the fishery.

CHAIRMAN BOYLES: Thank you, Tom; is that a motion?

MR. FOTE: I usually don't make motions because you make me read them; but, yes, I'll take that in the form of a motion if the staff will basically be kind enough to do what they always do for Pat Augustine and write me up one. (Laughter)

CHAIRMAN BOYLES: Bear with me here, Tom, for just a second. **Would the motion be that cast net fisheries for menhaden would be managed under the bycatch allowance?**

MR. FOTE: Yes; **and it is the responsibility of the state to gather all the information they possibly can and basically do all the reporting they can so we know what the size of that catch is.** It doesn't get them past the reporting requirements, but handles it under bycatch. I think that would address the problem.

CHAIRMAN BOYLES: Is there a second to that motion? Seconded by Jim Gilmore. Discussion? Rob.

MR. O'REILLY: I'm wary of going down this path. I think that since December 2011, having attended each meeting, that it seems to be that exceptions are popping up. I understand why that happens; but even with making this bycatch, at that December 2011 meeting the board talked about reviewing and revisiting the 6,000 bycatch.

If you remember, different estimates were thrown around, 4,000, 5,000, and 6,000 was finally settled on. I do have to pay attention to Item 4 with the technical committee that indicated that the biological impacts from this situation with Florida would not be a jeopardizing effect on the stock.

However, once the board starts to entertain and approve possibly other situations that

Draft of the Atlantic Menhaden Management Board Meeting Proceedings February 2014

are similar, then it does have an impact. I think before we start to go down this path, it is probably better to recognize what we're going to do overall with the bycatch. It is probably better to recognize which fisheries are actually directed and which ones are not.

MS. LYNN FEGLEY: Mr. Chairman, I share Rob's concern. Hindsight is 20/20 and I almost feel like I take some responsibility for this as the maker of the 6,000 pound motion. The intent back then on that really long day in December of that 6,000 pounds was really for those gears that are stationary, that are sitting in the water and are not moving.

The fish come to the nets so the fishermen don't actually have any sort of option to direct. I agree completely that cast nets are minor, but the bycatch allowance now as it stands is 6,000 pounds. I don't if the cast netter can catch 6,000 pounds; that seems like a lot of fish for a cast net. I think in the state of Maryland we don't allow any mobile gear, a gill net, anything that can move to catch more than 1,500 pounds on a bycatch allowance.

That would potentially decrease – the 6,000 pound bycatch in our state is reserved solely for those people with the stationary non-movable multispecies gear. I think that if we're going to go down this road it would really be good to not only define what is directed but also try to get at what is an appropriate bycatch allowance for these gears. Maybe this should be held until April and maybe we can think about setting trip limits for these guys rather than a bycatch limit, rather than the blanket bycatch allowance. I'm a little bit nervous about this because it goes beyond the intent of the initial motion. Thank you.

MR. G. RITCHIE WHITE: Mr. Chairman, the motion opens up cast netting for everybody and not just Florida. I guess one question is did the technical committee look at opening up cast netting to all states and what impact that might have as opposed to just Florida? I guess I'm wondering whether we have the ability to do this without an addendum.

EXECUTIVE DIRECTOR ROBERT E. BEAL: I'll tackle the second one first, if that is all right. I'm not sure if the technical committee talked about the impact to the cast nets or the potential for other states to have an increase in their cast net effort. As far as an addendum goes, that is a tricky one.

When this approved the Amendment 2, they recognized there were a number of things in the bait fishery in particular that there was some uncertainty there with past reporting and how that would operate and how the 6,000 pound bycatch provision would operate. There were a lot of things that the board was pretty open about and said we're going to see how this goes, report out once we get the landings in April and then decide where to go from there.

As Lynn just reported, if the intention of that 6,000 pound bycatch limit was really to only accommodate stationary gear that could not avoid harvesting some menhaden and wanted to convert those caught menhaden from dead discards to landings, then this probably would trigger an addendum.

I think it could be a very simple addendum to do something like this, but simple and menhaden usually don't get along very well. I think if the board wanted to go down the road of doing an addendum and they kept it to a very strictly defined issue with cast nets and maybe a trip limit for cast nets, as Lynn suggested or whatever it is, I think an addendum could be done fairly quickly and simply. If the board starts hanging a lot of other issues on it, then all bets are off.

DR. LOUIS B. DANIEL, III: Man, I'm glad I'm not the chairman anymore.

CHAIRMAN BOYLES: And I'm glad I am.

DR. DANIEL: Good; you're going to be busy. I think this does require an addendum, but I think we need to address the six and 12,000 pound bycatch issue. From what I'm

Draft of the Atlantic Menhaden Management Board Meeting Proceedings February 2014

hearing up and down the coast, it is being enacted differently up and down the coast. I feel we might run into some compliance issues down the road. I think it would be most appropriate to – I support what Florida is trying to do here fully; but I think to make a change to our management plan for menhaden, with all of the interest that we have, and not do it openly and transparently probably would be a mistake. I think if we could have maybe a withdrawal of this motion and maybe a motion to develop an addendum to address the cast net and the bycatch allowance in the menhaden fishery might be a more appropriate way forward.

MR. JAMES GILMORE: I seconded this motion actually just to get this discussion going. I agree, but I think the issue gets bigger than this. I was thinking when we had talked about this the last couple of meetings is that we've got quota issues that were maybe set that didn't make any sense.

There were a whole lot of problems with this original implementation that we really needed to talk about. If you remember a couple of meetings back we were going to collect data; and then once we did the best we could, we were going to come back to the board, which was going to be after April.

My gut feeling was we're going to need an addendum that is not only going to need to include this but the quota issue, whatever. I agree with Louis. I think we're doing this piecemeal with this motion right now; and it might be better to delay this until the May meeting and talk about the bigger issue. Thank you, Mr. Chairman.

MR. KYLE SCHICK: I concur with a little of that. I had a friend that had a cat that sounded like a dog when it tried to meow; but it was still a cat. Bycatch is bycatch; directed fishery is directed fishery. We really don't need to start mixing this up. We have to go to the root of the problem. The root of the problem is we went too far; we restricted too much.

We let emotion drive the car and now we're resulting in a crash. Everybody has their own

little issues of why we don't have enough quota. The reason we don't have enough quota is because we restricted it too much, based on science that was not all there, and now we're sitting with a situation where some of us were talking about before all of this occurred.

Now, I think you're right; I think we need an addendum to straighten this situation out. I think we have to look at the quota overall, the restrictions. I think we have to liberalize some things, not a lot; but I think when we're talking about a cast net fishery, I think when we're talking about bycatch with gill nets, bycatch with all kinds of things, it is ridiculous if somebody has to throw back a bunker because it gets caught in their gill net. The fish is dead; let them put it in a freezer and use it for crab bait next year. I think we have to look at these issues, and I agree.

MR. FOTE: Well, I was waiting for a substitute motion, but I will hold off for a few minutes and hear some more information.

DR. DAVID PIERCE: I'm glad this has come up. Clearly, the motion is a bit disingenuous because we talk about managing cast net fisheries that have been cited correctly so by the Chair as being a direct fishery; and we call it subject to the bycatch allowance. That is disingenuous and many people will pick up on that and question us and wonder what we're thinking. I do agree with other speakers that in the interest of getting a plan in place relative to state quotas and restricted fisheries, that we didn't deal appropriately with cast net fisheries.

I can highlight that concern from the perspective of Massachusetts because as we have attempted to and we have successfully implemented a management program for menhaden in our waters; we've had to deal with many members of the public, many fishermen who have said we have cast net fisheries, we catch small amounts of fish, it

Draft of the Atlantic Menhaden Management Board Meeting Proceedings February 2014

is in the fall; how are you going to allow us to continue with your relatively low state quota?

We struggled with that and, frankly, I still struggle with it; and I don't believe we have been able to adequately address it. I think an addendum would be appropriate that would allow a cast net fisheries with some trip limits, possession limits exempt from state quotas with states bearing the responsibility for reporting. I think that makes a great deal of sense.

We can give more thought to what should be the possession limits to make sure that we don't create problems by creating loopholes that would enable states to inadvertently or advertently sidestep the restrictive quotas we have in place. **I would make a motion substitute and that motion would be to develop an addendum that would allow cast net fisheries for menhaden, subject to trip limits and exempt from state quotas, with states bearing the responsibility for reporting cast net fishery catch.**

CHAIRMAN BOYLES: Motion by Dr. Pierce; is there a second for a substitute motion? Walter. The original motion was move to manage cast net fisheries for menhaden under the bycatch allowance, with the state bearing responsibility for reporting. That motion was by Mr. Fote and seconded by Mr. Gilmore. The question before the body now on the floor is the substitute motion by Dr. Pierce and seconded by Walter. Bill.

MR. WILLIAM J. GOLDSBOROUGH: Mr. Chairman, I want to echo a couple of the remarks about the need here is to get to the fundamental problem. While the substitute motion is an improvement, I still think it does not do that. I think the problem in Florida is a problem we've seen in a lot of states; and basically that is that we did not have good baseline data for the '09 to '11 period for the small-scale bait fisheries.

In Florida that is cast net, but it is other gears in other states. Because of that, we actually had an unintentional reallocation between reduction and bait; a very small scale, mind you, but I think the

effect is large in those small-scale fisheries. I agree with the sentiment that we shouldn't just sort of put a band aid on this particular issue, but we ought to deal with it more fundamentally.

I think that is going to have to mean in May. I would note that I think this echoes some of Mr. Hastings' intent that we not only review what happened in 2013 in May, but we also ask states to come forward in May with their best recalculation, re-estimate, whatever data they have, whatever they can generate.

I know some states are doing this and trying to appeal to their harvesters who did not report during that period and see what kinds of documentation is out there about catches that may have occurred in those fisheries and see if we can improve on the baseline that we had in that period and that any addendum should be based on that, should be based on adjusting – it may even be adjusting the total catch that took place during that period.

It may not even affect the reduction catch, as it were, change it from last year – and that is not my intent at all, but I think the effect would be to have a more appropriate allocation even within the 20 percent cutback that we adopted. I don't think now is the time to address that issue. As was brought up, I think we all know we moved up the benchmark assessment by a year in order to get the best available science one year sooner to look at that issue.

The issue before us right now is how good a job did we do at actually establishing the baseline catches that were going on from which we reduced by 20 percent. My suggestion would be that we go down that road; and I would love to start that process now if that is possible, but I'm afraid it couldn't start until May. Thank you, Mr. Chairman.

CHAIRMAN BOYLES: Thank you, Bill; and I appreciate you bringing up where we are on the stock assessment. My intention in

Draft of the Atlantic Menhaden Management Board Meeting Proceedings February 2014

trying to lead us down this road was to avoid piling up a lot of work on staff and particularly the stock assessment subcommittee and the technical committee, but this is a good discussion. Rob.

MR. O'REILLY: Mr. Chairman, it just seems as if we're getting ahead of ourselves. There is an assessment process underway. I agree that there is more than just the cast net to consider, but I'm not sure we want to consider too much until we see the assessment results and know the status of the stock.

This substitute motion is an invitation to add take, to get some cast net fisheries started maybe that haven't been, just as Jim Gilmore pointed out; and I think that goes beyond where we stood back in 2011 with Amendment 2. I think again the technical committee in Item 4 makes it clear – and I think I heard Bill Goldsborough say this as well – that you can compound a problem by adding on to it, whether it is cast net or other provisions.

If there is going to be some type of addendum, at least let's look at the whole scope of the way Lynn Fegley talked about it. I think you have to look at Amendment 2 and decide really what is a directed fishery, how is it defined. Then we have to look at our bycatch to see how effective that has been, as was promised by this board to do once all the information was in.

We do have a cast net quota in Virginia; so we have a certain set-aside just for the cast net. That is because we have the reported data. I recognize that a number of states don't have that reported data from the timeframe of 2009 to 2011; and I am very aware of the efforts that some of the states have made to collect that information and it is a difficult task. I do think we need to go cautiously here because we're still operating off of the previous decisions of the board that relate back to 2011. Thank you.

MR. SCHICK: Basically Rob said everything that I wanted to say that I think that we have to look at all mobile nets and not just cast nets and the issues that they bring to the table and what

impact is that going to have as far as pulling that all out and allowing some of that to go on.

MR. FOTE: I guess here is my concern. If we go to an addendum to take care of all this, it is going to take a long period of time. Now, we took care of – because we all had pound net fisheries or fyke net fisheries that basically caught menhaden and we took care of that when we looked through the process of doing that.

We really didn't look at the cast net as such; so there really are no rules. How do we allow them to continue operating until this amendment; and I think that is the problem. I don't have any problem going through an amendment to do all the long things, but I don't want to shut a fishery down in a state because we took provisions to create other fisheries or protect other fisheries like the pound net fishery and the fyke net fishery and everything else,

Because we knew it was such a minute part of the overall thing, we just kind of sloughed it off; and now there are consequences of doing it that way when we don't do it in the beginning. I'm just looking at trying to get Florida or any other state past that period of time until we get the major amendment we need. I agree with you, but how do we allow them or do we just let them go as they are and reporting the data? That is what I don't understand how we do that. That is why I made the motion in the first place.

MR. WHITE: Mr. Chairman, it seems like from what I've heard around the table that it probably doesn't make sense to start an addendum that delves into everything; that it is premature; we need to wait for the stock assessment. Why not try to solve Florida's problem in the interim until we get to the stock assessment and make a long-term solution?

What if we just add Florida into the substitute motion so it is not everywhere; it is just Florida. It solves that problem and

Draft of the Atlantic Menhaden Management Board Meeting Proceedings February 2014

then we deal with cast nets, the bycatch, all these other issues after the stock assessment; so we're in essence giving Florida a year so we don't shut their fishery down and then we deal with all these issues after the stock assessment.

MR. DAVID SIMPSON: I apologize I came late and, boy, I really regret it now. I guess we had a discussion that somehow the bycatch allowance that we have in a lot of bait fisheries was not adequate to address this problem. My view from the beginning and I made a point of looking for clarity on this that a bycatch allowance is a bycatch allowance just like for sea herring.

It is 2,000 pounds and we don't manage anything at a finer scale than that. Now, that is a much bigger number than I ever imagined that we would be talking about. I thought we'd go one or two thousand pounds. Early on I also asked about do we need to define what a recreational fishery is; because for menhaden they're not just snagging. They use nets, gill nets.

Some states don't have any limitation on the size or number of nets you can use in a recreational fishery. There is a whole host of things beyond cast nets. I would hope we would address this in a more general form that there are small-scale fisheries that we know exist and have always existed.

My understanding as we developed the addendum was we need to improve the catch statistics on those small, dispersed fisheries. I would like us to get back to that focus and not begin to micromanage the largest fishery in the United States based on how many are caught in a cast net.

MR. GILMORE: Dave made most of the points. Ritchie, I agree of quick fix, but I'll tell you right now New York has had a cast net problem. I think if we go around the room you're going to have a whole bunch of them; so we're going to add everybody onto this list if we do that.

MR. ESTES: To Tom's point and to Ritchie's point, we would like some relief because I think

with our additional reporting my guess is our fishery will shut down. If we don't use the bycatch allowance like we did last year, our fishery will shut down probably in April to May.

MR. AUGUSTINE: Mr. Chairman, I was going to pass and then decided I better say something. Enough comments have been said that we all know and recognize that the issue is much bigger than just one little piece. You've stated it very clearly, Mr. Chairman. Will an addendum be put through with enough – could it be put through with enough elements in it to really hit a homerun to cover the major elements we have to address or would we have to go to an amendment?

That is just a quick question because if it is going to take a lot more with the amendment as they typically get much bigger, then maybe we should go to an addendum. If that is the case, I would almost suggest we – it is tough one but I'll ask – that these motions either should be tabled or rescinded and come up with a clear-cut statement of what will address the issue for now.

We are faced with a reporting issue and reported because I think the numbers are going to be astronomical that come in from the states. New York is the first example. We've got our folks finally reporting. To do it piecemeal, as has been stated by Mr. Gilmore, Mr. Fote and so on, it is ludicrous to start off down this path.

We have done this too many times and end up with a monster on our hands, create something and then try to fix it the next year. It just doesn't make sense; so, your choice, Mr. Chairman. I would move that it is either rescinded or whichever way we go. I think with the language that has been put on the table between Ritchie and Rob and several others and yourself, we probably could piecemeal a relative clean-cut addendum statement that we could put through relatively quick and address that

Draft of the Atlantic Menhaden Management Board Meeting Proceedings February 2014

issue with Florida at the same time. Thank you.

MR. DAVID V.D. BORDEN: Mr. Chairman, although I'm completely sympathetic to both proposers of the first motion and the second motion, I don't think either one of those courses of action are appropriate. Just listening to all of you, you've basically identified probably half a dozen problems that we need to fix.

Our commission chairman basically offered the opinion, which I agree with, that we should have a discussion on those problems and then decide on what course of action, if appropriate, to fix those problems. My guess is if we follow that type of procedure, what you will end up with is a fairly comprehensive addendum that will take a little bit of time and probably link up with the stock assessment. Procedurally I can't vote in favor of either one of these; and I would be more comfortable having both of them either withdrawn or tabled and then get on with the larger discussion of identify the problems and then figure out what the appropriate way to solve those problems is. Thank you.

MS. FEGLEY: I agree; I was just going to say that I felt like I would maybe have a little more comfort with this if there was a one-year limit in there. I think that is correct; I think it is something we just need to address. I think when we look at our hierarchy of problems, of which there are a few, one of them, which is not addressed here, is this definition of that bycatch allowance.

I think nobody really understands which gears, you know, what are the criteria; and I think it is our responsibility to go forward and really set out some criteria for gears that qualify so that we're all being consistent. The more years we go through with every state doing things differently, the more of this kind of thing we're going to have; and we're never going to get out of it. I think the first step for us is to go back and fill in those gaps and develop some criteria so that we all know what we're trying to adhere to.

DR. PIERCE: I appreciate the sentiments of those around the table who would like to see

both motions withdrawn. However, I still think they're appropriate to consider. First of all, they're on the floor; and second of all, Mr. Chairman, you attempted from the very beginning to help this board deal with the specific request from Florida, which was considered to be a very important request from that state.

Now we have heard that if indeed we don't deal with this issue, the fishery could be shut down in April, something like that, I can't recall the exact words said by Florida. If we're going to deal with the Florida request today – and that is on the agenda; that really is the agenda – if we're going to deal with it today as opposed to saying wait until we figure this out through some addendum that would incorporate many other things to deal with problems that we know exist and now it is time to address them, then Florida does not get its issue addressed.

It does not get any response from this board. I like the first motion. I said it was disingenuous initially because we're going to say there is a directed cast net fishery that can be considered under the bycatch allowance. That helps Massachusetts; I like that. Again, to be not disingenuous, I thought the substitute made sense and to be very focused relative to how we deal with cast net fisheries and that would then enable us to deal specifically with the Florida request all the while acknowledging that there were some other issues to deal with.

They are big issues, but we're not going to be able to deal with it today, not in the time period that has been allotted to us. I still think the motion to substitute is appropriate; and if that fails, then I will support the original motion.

MR. O'REILLY: I am going to correct myself and get it right. Back in 2012 with Amendment 2, but it sure seems like longer than that, but there was a comment about sort of pushing aside the cast net and not really counting it. I don't understand that

Draft of the Atlantic Menhaden Management Board Meeting Proceedings February 2014

comment because certainly we have a cast net as part of our quota.

I would have thought that under Amendment 2, if you had cast net landings that were reported, then that was certainly part of what you did as far as your quota went. I guess all states probably didn't have that, and I understand that, but at the same time that is a fact that is a fact that you went by your reported landings, and that is what the quotas were all about.

I don't see how we get past that; and I don't see how we get past the technical committee meeting. I certainly can't support the substitute motion which now generalizes everything. It makes it wide open. We start with one request from Florida that the technical committee has given us advice on and now we're making motions that really just shouldn't be there.

CHAIRMAN BOYLES: Let me see if I can recap. Dr. Pierce is right, we have an agenda item – I'm sorry, Louis.

DR. DANIEL: Just real quickly; no directed fisheries for Atlantic menhaden shall be allowed when the fishing season is closed; so you're cool as long as your fishing season is open. Then it says that an incidental bycatch allowance of up to 6,000 pounds per trip for non-directed fisheries will be in place after the season closes. That begs several questions. What is a directed fishery for menhaden? We don't have that defined. I thought we had said – I remember we did our little round robin where we all asked for the two limits if there were two participants on board. That is not in the plan.

I'm not exactly sure where that is. That may have been in an addendum or something, but I don't know where that is anymore. It is not specific to stationary gears; I thought it was. I think our regulation says for pound nets, but I'm not sure. I don't think we have a directed cast net fishery for menhaden in North Carolina; we may.

Maybe I'm causing a problem for myself here, but without having had Oregon Inlet open and not having had a lot of menhaden landed in

North Carolina, I haven't really paid much attention to it. My expectation would be that if we did catch our quota and we closed the directed fishery, if somebody landed menhaden in cast nets, I probably wouldn't think enough at this point to close it.

That is where I think we've got problems and where we've got inconsistencies around the table as to how we're managing the fishery. We either recognize that now and fix it apriority assessment, which is another year off, probably, and probably a year and a half off through peer review; but first and foremost we need to give Florida a get out of jail free card or whatever they need in order to continue what they're doing and then try to address the bycatch issue, the cast net issue and maybe even the quota issue as quickly as we can. That is just another suggestion, Mr. Chairman.

CHAIRMAN BOYLES: The way I see it, to back to Dr. Pierce, is we have a request on the agenda from Florida for conservation equivalency. The technical committee has recommended to us that based on a biological assessment they don't see this as a conservation equivalency. The second issue is this question of cast nets – excuse me, small mobile gear; maybe small gear.

I'm not really quite sure what we're talking about or maybe we're talking about all of those things. The third issues we have got before us is bycatch and what constitutes a directed fishery that Dr. Daniel has so eloquently pointed out. The fourth thing in the back of my mind is that years ago we talked about the recreational fishery for menhaden and specifically said we're not talking about the recreational fishery for menhaden.

I thought that a lot of our recreational fisheries for menhaden were like my state's where they were cast net fisheries, which is why I suggested we go down that route. The fifth thing is that we've got this all-important assessment that we have all agreed is priority number one; and the

Draft of the Atlantic Menhaden Management Board Meeting Proceedings February 2014

administrative commissioners have all committed to support to the degree we can.

There are a lot of issues here floating around. The way I see things we should deal with Florida's request at this meeting. It is on the agenda. Now where we go from here, I am going to turn to Mike Waine who is the Wise Sensei of Menhaden. Hail Mary, Mike!

MR. WAINE: I thought you were going to get us out of it right there. I agree we have conservation equivalency for the state of Florida at this meeting. Obviously, a lot of this discussion is about this bycatch allowance and the cast nets and the other small mobile gears. The board stated in December, when we approved Amendment 2, that we're going to have to look at this when we get the information. We've requested the information and I will be hammering that on your coming next.

We want to know what these bycatch landings are before we can really take a look at this and deal with it appropriately. We won't be able to do that at this meeting. We can hopefully bring that back in May with some understanding of what the bycatch allowance landings ended up being for 2013. That will give us a better picture of where we stand with all of this.

I think for the longer picture, if we're going to do an addendum in the interim, I'm not sure we have the information at this point to do that, but we should have it when we get the compliance reports and get a better understanding of what the bycatch landings were for 2013. Potentially the board could revisit that in May; and in the meantime at this meeting we would deal with the conservation equivalency for Florida.

MR. WILLIAM A. ADLER: First of all, I agree with Louis with his get out a free card or whatever for Florida. The other thing was the 6,000 pounds after the quota has been taken; would that keep Florida's fishery going under that 6,000 pound thing. I don't know if it would. If not, I don't see that this substitute motion that my colleague made really helps them this April. Maybe I could ask whether the 6,000 pounds would keep them going; and if

not, we do need to do something with Florida for this year in some form. Thank you.

MR. ESTES: After we closed the fishery this past year – I think it was in September – we allowed for a 1,000 pound bycatch because we wanted to be more conservative than the 6,000 pounds because of the cast nets. To answer the first question, 6,000 pounds is more than we needed and we probably wouldn't even want that. We would do something more restrictive in the state.

MR. SIMPSON: I will just share that is how we manage it in Connecticut. Everything counts toward the quota; but once the quota is filled, we allow a bycatch fishery which means you can take up to 6,000 pounds with any legal gear in Connecticut. Now, purse seines are not legal in Connecticut; but if somebody is fishing a gill net, they can, or a cast net.

I think one of the things that makes that work is that we did adopt a recreational creel limit for menhaden because our problem was we did have cast netters that were causing local political problems for us. They're catching an entire – can you believe it, an entire pickup load of menhaden in the harbor, and this was a crisis in Connecticut.

We had no way to enforce it because unless you followed those fish back to Massachusetts and prove that they were being sold, there was no violation. We imposed a 50-fish limit. If you have more than 50 fish, you need a commercial license which has been under moratorium since 1995; so we have very much contained the issue.

This year I think our landings; total state-wide landings were 6,000 pounds. We are not a threat to the menhaden resource; and again we tried to focus on contain a problem and get a good accounting of what we are removing so that we have a better stock assessment. I think that is how we have to

Draft of the Atlantic Menhaden Management Board Meeting Proceedings February 2014

go with Florida for now. That is my reading of the regulation and the practice. The common definition of the terms we use “directed fishery” in sea herring means taking more than 2,000 pounds and the same applies here, to my mind.

MR. GILMORE: A suggestion, Mr. Chairman; after listening to Mike’s comments – and I kind of agree with them – and this is sort of a question back to Florida; if we withdraw or suspend the substitute and go back to the original, put a one-year timeframe on it and essentially do that as the band aid for Florida and any other cast net fisheries and then we take care of that without even having to get into a discussion about conservation equivalency, we just put a band aid on that. It makes me happy because it is going to fix my problem short term also. Then when we get to May, we can start an addendum to start dealing with the bigger issue.

MR. O’REILLY: This is drawing out a little bit, but I do think the idea of just placing this in bycatch that was suggested just goes outside the framework of the amendment. The second thing is I can understand the idea of counting it towards the quota; but when the bycatch was developed, it was not part of the quota. That was the whole situation.

It would be reported but it was not part of the quota. I just wanted to make sure that was understood. Thirdly, I guess the band-aid approach; it depends on how many band aids – and I don’t mean that flippantly, but how many other requests are received after Florida. That would be important to talk about.

MR. DOUGLAS E. GROUT: Mr. Chairman, I’m trying to look for a way out of this, too, and one piece of information that will help me is this concept of exactly when the assessment is going to take place and when the peer review is going to be available. I think if we go with the suggestions that were made by Mr. Gilmore and I believe it was also made earlier is that we put a sunset provision on whatever we do.

Whether it is the motion to substitute or the original, I’d like to have not just a one year, but let’s find out exactly when the stock assessment is going to be, the peer review is going to be

done and that we will have it available for information to start a full addendum to address this.

MR. WAINE: We’re scheduled for SEDAR 40, which will be reviewed in December of this year. We anticipate, if all goes according to plan, to deliver the results of that benchmark assessment at our winter meeting in 2015.

MS. FEGLEY: Mr. Chairman, I was going to try to make a Hail Mary here; and I was going to, if I can, move to amend the substitute motion that this would be in place for the 2014 fishing season.

CHAIRMAN BOYLES: Lynn, could you hold that for a little bit.

MS. FEGLEY: You betchya.

CHAIRMAN BOYLES: Okay, Louis.

DR. DANIEL: Well, I’m hearing different opinions around the table; and I think I like the last one better and so I’m going to push for this. I don’t think the technical committee’s – that is a recommendation that we don’t have to take. We can approve Florida’s request for one year. I think if you look back at the technical committee’s review, it was sort of predicated on other states jumping in might cause some problems.

Right now we’re dealing with Florida; so I am a little nervous about approving something against the technical committee’s advice, but not that nervous. Then I thought we talked maybe then having the data at the May meeting to flesh out what needs to be in the motions that are on the screen now. I think if we could get the motions on the table withdrawn and make a motion for Florida with the expectation we will come back in May with our laundry list of issues for an amendment or an addendum, we will move along quicker. That is just a suggestion.

Draft of the Atlantic Menhaden Management Board Meeting Proceedings February 2014

CHAIRMAN BOYLES: Thank you, Mr. Chairman; I love your suggestions. I would love to take you up on it, but I think we're way too far down the rabbit hole. What I would recommend is that we go ahead and vote on these motions as they are presented and then see where we end up. It is clear to me that there is strong interest in doing things the right way, and I appreciate that. We will get back to Florida's conservation equivalency. Representative Abbott.

MR. DENNIS ABBOTT: No longer representative. I think that we should vote on the substitute motion and then that would become the main motion and then that would be open to quick further amendments as was suggested with the date time certain, et cetera and et cetera. That would get out of the rabbit hole.

CHAIRMAN BOYLES: Let's see if we can climb out. Is there any further discussion? Seeing none; I am going to read the motion that we will be voting on. It is the substitute motion and that motion is move to substitute to develop an addendum that would allow cast net fisheries for menhaden, subject to trip limits and exempt from state quotas, with states bearing the responsibility for reporting cast net fishery catch. The motion was by Dr. Pierce and seconded by Walter. Time to caucus; one minute to caucus.

(Whereupon, a caucus was held.)

CHAIRMAN BOYLES: All right, I'm going to call the question. All those in favor of the substitute motion, which for clarity is the lower motion, signify by raising your right hand –

MR. STEVE MEYERS: Mr. Chairman, excuse me, sir, question; are we voting to make the substitute motion the main motion?

CHAIRMAN BOYLES: Yes. Again, for clarity, all those in favor of the substitute motion raise your right hand; all those opposed raise your right hand; null votes; abstentions, one abstention. **That motion fails**; it was a vote of 5 to 12 to 0. Mr. Borden.

MR. BORDEN: I was not an abstention. I was just raising my hand because I would like to be recognized.

CHAIRMAN BOYLES: The motion fails five to twelve. Mr. Borden.

MR. BORDEN: **I would like to make a motion to amend the original motion that on the second line, after the word "menhaden", I would like to make the motion to add in for one year.**

CHAIRMAN BOYLES: There is a motion to substitute; is there a second? Seconded by Russ Allen. Discussion? Tom Fote.

MR. FOTE: I would accept that as a friendly amendment so you don't have to go through a vote.

CHAIRMAN BOYLES: We're so far down that rabbit hole, thank you, and I appreciate that.

MR. GROUT: Can I make a motion to amend the amendment or not? My issue is just from a fishing year standpoint and a timeframe. One year from now may not get us down to a solution on a bigger scale to this. What I was suggesting was that if we had the time to have the amendment and start down a more comprehensive adjustment to this type of an issue, we might need to have it through the end of 2015. I was wondering if the maker of the motion would be amenable to that since I can't make a second motion for an amendment.

MR. FOTE: I would do anything to get this moving because we've spent a lot of time on something that should have been pretty simple and we spent an hour and a half on it. If you come up with wording that you want to be as a friendly amendment that would basically get us through and we could vote on this, I will do it.

Whether it is the winter of next year or winter of this year; so it is either one; the pleasure of the board, just give me some

Draft of the Atlantic Menhaden Management Board Meeting Proceedings February 2014

direction and I will take a friendly amendment. We all have the same problems. After listening and talking to people, we're all trying to do things and we're not doing the same things in each state.

I guess Florida's mistake was coming to the board and asking for this. If they hadn't asked for this, they wouldn't have had a problem. Because they were trying to do their due diligence, they got messed up, where other states just said, well, we'll take care of it in the state. I don't want to give somebody a hard time of doing due diligence. If you want to make it until a year and half because that is hopefully when we get – as long as it is an amendment, I have no problem with that.

CHAIRMAN BOYLES: For clarify purposes – and I've heard a lot of different comments around the table in the hour discussion – Tom, you're right, I think we need to vote on whether this is for the fishing year 2014 or Mr. Grout's suggestion for 2014 and 2015. Tom.

MR. FOTE: I will make one more comment. By the time we put anything in effect, it is going to be 2015, anyway, so why don't we just make it 2015. It is a year and a half from this point now and then hopefully an amendment will clarify a lot of the problems we have found out that we have right now. I'm just trying to be accommodating like I was yesterday.

CHAIRMAN BOYLES: Mr. Borden and Mr. Allen, is that sufficient for you for that to be through 2015?

MR. BORDEN: Yes, and the way I understood it Mr. Fote was willing to accept that perfection on his original motion, Mr. Chairman.

CHAIRMAN BOYLES: Okay, as a friendly amendment. Rob, did you have a comment?

MR. O'REILLY: Just a quick comment; there were several comments by board members about how Florida brought this proposal and we should look at what Florida asked us to do. I would not support this motion because it is not

specific to Florida. It is specific to cast nets and that is a big difference.

CHAIRMAN BOYLES: Is there further discussion on the motion? We have someone in the public who wishes to make a comment.

MR. PATRICK PAQUETTE: Mr. Chairman, Patrick Paquette; I'm a recreational fishing advocate from Massachusetts. I just want to express a concern. I don't disagree with where the board is trying to get to; but I think that doing this under the bycatch provision is just going to be a nightmare.

I think changing the definition of bycatch is what you're doing; and I think it is just a nightmare that could open up some ugly stuff. I have a suggestion instead of saying, hey, I don't like what you're doing. It is another nightmare, but I think it is a much lesser nightmare. My suggestion is that instead of using and creating a loophole in the bycatch, I would say that this was an anticipated – you got lots of comments as we went into the amendment that this was coming.

I would say that the loophole that gets you out of this a little bit; this is an episode. I would say it is a seen episode, but this is an episode. You're going from no management of this species to management of the species – and as always some of my own colleagues, you're not going to like that I'm saying this, but that is your out. Your out is to call this an episode, use your episodic bit. You're not relieving quota and you're not bastardizing the word "bycatch" for lawyers and judges to fight with for the next ten years. Just a thought. Thanks.

CHAIRMAN BOYLES: Mike, why don't you comment there, if you could, please.

MR. WAINE: The suggestion – just remind to everybody, we have an episodic event set-aside which was intended to be used for the New England states when they have

Draft of the Atlantic Menhaden Management Board Meeting Proceedings February 2014

menhaden in their waters and a higher abundance than they normally occur. We have talked about this quite frequently in the past; so 1 percent of the overall TAC is set aside for those episodic events. That is the quota that he is talking about, the part that was set aside for the episodic event.

MR. RICK BELLAVANCE: Mr. Chairman, I support this motion. I think it goes a long way to relieve fears of these small fishermen in Florida as well as other states and offer them an opportunity to report their landings accurately for this season and the next season and help us to get to that data gap that we currently have.

MR. ROBERT BALLOU: Mr. Chairman, I, too, am going to support the motion. I am going to do so on the principle of adaptive fisheries management. I think we're doing the right thing here, a short-term fix with a long-term solution in mind as well. Thank you.

MR. SIMPSON: Just a question for clarity; does this apply to commercial cast net fisheries only – it doesn't speak to that – or is this any cast net?

CHAIRMAN BOYLES: I'll look to Mike; my read is that your interpretation is correct; recreational cast nets were not covered by the amendment. Mike, is that correct?

MR. WAINE: Yes.

CHAIRMAN BOYLES: That is correct. Tom.

MR. FOTE: I think what you need to do is move that information – that is not a motion. That is a friendly amendment so you don't need a motion for that and just put what Dave put in there.

MS. FEGLEY: I would just be so much more comfortable if there is any way – I completely agree that giving a fix for this for – while we're all learning – in a couple of years is a great idea, but I would be so much more comfortable if this wasn't under the bycatch allowance. If the motion could say "move to manage cast net fisheries under trip limits for the 2014 and 2015;

I would be a lot happier with that than opening up the bycatch allowance.

CHAIRMAN BOYLES: Lynn, I hear you and I'm going to look for Mike for confirmation; and, Bob, I want to build on something you said; this is adaptive management. Dr. Daniel, as Menhaden Board Chair, reminded us that this was a new day as we went down this amendment. I think we have seen some issues that have arisen with timing, but I'm not quite sure, Lynn, that provision exists.

I think where we're using the adaptive tools that we've got – and I think I've certainly heard from a number of you you're not comfortable with that. I think you all have made your case on the record; and where we find ourselves here is dealing with important issues – I appreciate the comments from the public – dealing with important issues with an important fishery, recognizing – I'll go back to what I said at the beginning; this is an extraordinarily small, small percentage, less than 1 percent of the bait landings.

This has been great discussion and I salute everyone's comments and salute everyone's sentiments; but this came up as a result of Florida requesting relief from the provisions of the plan under conservation equivalency. I recognize not everybody is really happy on how we got here. Bear with us; we will get better.

I want to go back and just be cognizant of the fact that we've got a very, very, very important stock assessment; and I'm concerned about loading up our technical committee representatives with amendments and addendums and such. Having said that, the way the motion reads – let's take this one just to be very precise – we are talking about dealing with Florida for the years 2014 and 2015. Is there any objection to dealing with – David.

DR. PIERCE: Mr. Chairman, it is not just for Florida. This is initiated because of a Florida concern, which is shared by other

Draft of the Atlantic Menhaden Management Board Meeting Proceedings February 2014

concerns, and your creativity at the beginning of this meeting led us to this particular point, and I appreciate that creativity.

CHAIRMAN BOYLES: Thank you, David, I misspoke. This is for cast net fisheries for 2014 and 2015. Before I read that motion, is there any objection for this motion applying to fishing year 2014 and 2015? I see none; and so, therefore, the main motion will read – let's get this on the board so everybody knows what we're voting on.

Thank you to Dr. Pierce and others that this applies to the plural states. This was initiated as the result of a conservation equivalency request from the state of Florida. However, the motion, if passed, would apply to all the states. Is that clear? Louis, do you have something?

DR. DANIEL: Yes, I'm sorry, and I'm just going to make the comment because I thought the audience member brought up an intriguing way out of this. We've already said that the cast net fishery is a directed fishery; it is not a bycatch fishery. It is not a multispecies fishery; it is a directed fishery. I would far rather approve Florida's request for conservation equivalency than change the definition of bycatch. That is going to come back and bite us on the fanny. I am going to vote against the motion.

CHAIRMAN BOYLES: Thank you, Louis; and I appreciate that. Jim might think otherwise, but Florida is not a New England state. I believe the episodic events in the amendment were specific to New England states.

DR. DANIEL: Point of clarification, Mr. Chairman. I wasn't saying to use that. I thought it was an intriguing idea. I was saying what Florida requested was for us to declare them conservationally equivalent. The technical committee said that there would be no biological problem with it done for Florida; and by doing it just for Florida, then I don't believe there is a biological concern and it keeps us away from the issue of the bycatch question. That is my biggest point. I'm fine now, I'm on the record, and I just wanted to make sure.

MR. TERRY STOCKWELL: Mr. Chairman, I do support the motion on the board; but when the word "episodic" came up, I smiled because I just wanted to remind the board it took us two meetings longer than this to wrestle our way through "episodic". I will leave it at that.

MR. GOLDSBOROUGH: Mr. Chairman, given the comments I, too, am uncomfortable with doing this under a bycatch allowance; and yet I do think that adaptive management is a viable framework under which to address this problem in the short term. I'm okay with doing something along those lines; but I wonder if it can't read "move to manage cast net fisheries for menhaden under conservation equivalency for 2014 and 2015," et cetera, as has been mentioned.

MR. FOTE: Maybe I've been wrong, but I think if we do it under conservation equivalency as it is now, you can't do it because once the quota is filled, then the fishery is shut down. The only provision that would allow us to do it – and that is why it is as complicated as it is – to move this as a fast and be able to allow this to happen, the only choice you have is to use bycatch or shut the fishery down.

They came to us and they asked the question – if they hadn't asked the question, we would have just went along because that's what other states were doing. That is why we're in the quandary that we're in. We can straighten out the definition and everything else, and that is really the concern here.

MR. WHITE: **You're not going to like this, but move to amend to add "for the state of Florida" after "menhaden".** I am uncomfortable with allowing other states to have two people on a vessel and taking 12,000 pounds of menhaden by cast net. That's probably a long shot that would happen, but I'm uncomfortable with opening up that door where we're only trying to solve Florida's problem on a temporary basis.

Draft of the Atlantic Menhaden Management Board Meeting Proceedings February 2014

CHAIRMAN BOYLES: Motion by Ritchie; is there a second? Dave Simpson seconds. Discussion? Dave Pierce.

DR. PIERCE: Yes, absolutely not. All the discussions we've had so far pertain to all the states benefiting from this; and frankly if we're going to be creative by saying that a directed fishery will be managed under the bycatch allowance, then I'm not going to support that just for Florida. It makes no sense whatsoever.

It indirectly gets us back to the conservation equivalency end of this, which is what Florida has requested. I don't support that, but the technical community has concluded that from biological standpoint the conservation equivalency principle cannot be applied to Florida's case. Again, this is an indirect way to get conservation equivalency for the state of Florida that is inconsistent with what the technical committee has concluded.

I still go back to the fact that in order to deal with this issue in an interim way, 2014 and '15, with equitable treatment for the states that have similar concerns regarding cast net fisheries, they could be restricted very simply with very low bycatch limits; and that is what Massachusetts would do, very low limits, the original motion makes sense. The motion to amend is not something I could support. It gives inequitable treatment to the state of Florida and I think it is inconsistent. It raises the question of inconsistency with the technical committee's recommendation.

MR. WHITE: In response to Dr. Pierce's comments, I think Florida's situation is a little different than other states in regards to the amount of quota that they have that has put them in this situation. I think clearly their fishery does not create a problem for us, as the technical committee has said. The technical committee did not say what would happen if we opened up all the states. I think you're definitely going in an area that we have not gotten advice from the technical committee on if you don't restrict it just to Florida.

MR. O'REILLY: I think that covers my comment, Mr. Chair.

MR. GILMORE: Ritchie, I have the same exact problem as Florida; so if we're going to do this, then I'm going to recommend – and I don't want to amend this thing essentially to put New York on there, and we're going to go around the table. Again, that doesn't solve the problem.

CHAIRMAN BOYLES: We have a motion to amend to add “for the state of Florida” after “menhaden”. Motion is by Mr. White and seconded by Mr. Simpson. Do we need time to caucus?

(Whereupon, a caucus was held.)

CHAIRMAN BOYLES: Are you all ready for the vote? All those in favor of the motion to amend raise your right hand, please; all those opposed; null votes; abstentions. **The motion fails.** There was one vote for; a number of votes against; and two abstentions. Mr. Adler.

MR. ADLER: Can I move the question?

CHAIRMAN BOYLES: Yes, sir. The motion is move to manage cast net fisheries for menhaden under the bycatch allowance for 2014 and 2015, with the states bearing responsibility for reporting. Do we need time to caucus? All those in favor of the motion raise your right hand; all those opposed raise your right hand; null votes; abstentions. **That motion carries 11 votes for, six against.** Jim.

MR. ESTES: If it is needed, Florida can withdraw our request. (Laughter)

CHAIRMAN BOYLES: I think it is moot now; I think you've gotten your answer. Thank you, Jim. These are very complicated issues and we've had extraordinarily good discussion around the table. I know it takes a lot of time; and I know there are a lot of diverse opinions about this fishery.

Draft of the Atlantic Menhaden Management Board Meeting Proceedings February 2014

I suspect that every time we make a vote that there are people who are greatly disappointed and people who are very happy. I appreciate everybody's forbearance as we work through these issues. Again, I'm going to reiterate the baton that was passed to me by Dr. Daniel when I took over as management board chair to really, really keep things focused on that stock assessment.

COMPLIANCE REPORT COMPONENTS FOR THE 2013 FISHING YEAR

I appreciate the conversation. We are going to move on now to Item Number 5, Compliance Report Components. Mike is going to talk to us about what he is expecting of us in our compliance reports.

MR. WAINE: I'm not going to go over this in its entirety just because we're a little behind schedule and all of this is laid out in the memo to the board that I put together. I just want to touch on a couple of things as it kind of focused us on the discussion we just had; and that is getting us the information on the landings and providing us information split up between what was landed under the directed fisheries and what was landed under the bycatch allowance.

The sooner we have that information the better we can assess what the bycatch allowance landings were and what the directed fishery was. Remember, there is accountability for this; so if you have an overage in your 2013 fishing year, you have to take that overage away for 2014 and adjust your quota.

We would like to have that information as soon as possible so that we can have everybody operating accordingly in 2014. I just wanted to mention that so you could submit your landings as soon as possible. Also, the benchmark assessment would like 2013 to be the terminal year; so including those landings is hugely important.

They are making quick progress as Genny tell us about. Having those landings is really – I'm trying to be real adamant about this. The other

thing that I want to make sure that the board is aware is for the bycatch allowance. If you can find this slide, anyways, just a reminder that in 2014 all states are limited to a 6,000 pound per vessel per trip bycatch limit regardless of the number of permit holders on the vessel.

The 12,000 pounds that we talked about was only for the 2013 fishing year; so it now is back to 6,000 pounds. There is no allowance for multiple permit holders on a single vessel to harvest more than that.

I just wanted to make that clarification as there was some confusion on that during the discussion. If there are any questions on the memo, I will be sending it around again regarding what the compliance report should contain. Just contact me and I can help correct that.

CHAIRMAN BOYLES: Are there any questions or comments for Mike? Okay, thanks, Mike, and we will now go on to the technical committee report; Dr. Nessler.

TECHNICAL COMMITTEE REPORT

DR. GENEVIEVE M. NESSLAGE: I'm pleased to report that the technical committee and stock assessment subcommittee have begun the official 2014 benchmark stock assessment process. There is a lot of work to be done, as you know. In preparation for this process, we have held ten meetings so far, six webinars and four in-person meetings, just to get the data together and ready for consideration for the stock assessment.

As you know, we have developed our TORs. We have also spent most of our time identifying as many new data sources that might be informative to the assessment as we possibly can. We completed preliminary workups of all of those of new data sources. All of that information was considered at the data workshop, which we held in January.

Draft of the Atlantic Menhaden Management Board Meeting Proceedings February 2014

To brief you on that meeting of January 14th through 16th, we held the data workshop in Florida and vetted all of the data sources that have been presented to us. It included fishery-dependent data sources, both bait and reduction landings, recreational landings as best we can identify them and catch-per-unit effort time series.

We also – and this was the big chunk of our meeting – investigated and took a close look at all the fishery-independent surveys and other data sources that had been identified and brought to the technical committee; and after considering numerous – I didn't do the total tally of them all, but it was quite a few – we ended up with 27 surveys that the technical committee felt would be suitable for the stock assessment group to consider including in the benchmark stock assessment.

In the past we have only really used eight different – well, seven surveys for the young of year and, of course, the PRFC Fishery-Dependent Index were all that were in the assessment, so this is going to be a big change. You'll see a very big change in the assessment as far as how many data sources and the spatial scope of those data sources in the assessment.

We also took a look at revising, updating and correcting our growth, maturity, fecundity and natural mortality inputs that go into the model. We also took a very close look at that historical tagging data set that you've heard about. Will Smith in North Carolina has been very helpful even though he is not on the technical committee in analyzing that data for us given his background.

We believe that we will be able to use that data to inform natural mortality and also get a handle on the estimates of migration rates between the northern and southern regions. We also spent a good deal of time at the end of that data workshop developing a plan for how we would approach modeling this stock in a new way to address some of the concerns that had been raised during the last stock assessment.

We have kind of a rough outline of what new models we will consider and how we would configure that to incorporate some of the spatial considerations that were not taken into account in the last assessment. We assigned tasks for the June assessment workshop. And just to remind you of our timeline here, we anticipate – well, there will be a press release that will go out soon, I hope, that will have all of the details in them, but we anticipate at least tentatively that April 1st – no joke – will be our deadline for finalizing all of the data and model inputs May 1st will probably be the deadline for public submissions of any alternative models or analyses. If you are considering that, please me. Then we anticipate the first week of June will be our assessment workshop in Beaufort; and the second week of December will be SEDAR 40 and that will be our peer review workshop.

We're hopeful, if we can stay on track, that we will have that peer reviewed and presented to you at the winter meeting, as Mike said, in 2015. I just wanted to give you a brief update on the Ecological Reference Point Working Group. We met in December of 2013 to finalize the MS-VPA Model Update in preparation for the menhaden benchmark.

As you may recall, the output of that model is usually used as an input for the natural mortality time-varying, age-specific natural mortality matrix that goes into the menhaden single species stock assessment. We identified some kinks in that model that we're going to be hopefully ironing out in the next month; but hopefully that will be delivered on time for April 1st.

Then we anticipate we will meet again in the spring of 2014 to work on the TOR that is included in the menhaden benchmark assessment to identify potential ecological reference points that would consider menhaden's role as a forage fish and to outline our proposed methodology and plan of attack and get some preliminary feedback

Draft of the Atlantic Menhaden Management Board Meeting Proceedings February 2014

from the peer reviewers on that approach. Thank you, Mr. Chairman.

CHAIRMAN BOYLES: Thank you, Dr. Nessler. Are there questions or comments for Genny? Dr. Pierce.

DR. PIERCE: Thank you, Genny, that was a very informative report. Ordinarily I wouldn't raise this issue, but some members of the fishing industry have already discovered an important development, and I wanted to raise it here and ask you a question relative to it. An aging workshop was held and my understanding, from talking to my staff, is that a significant problem was found with the way in which fish have been aged in the past; that there is a much earlier age at maturity.

I have spoken with the Micah Dean of my staff to ask the chair about this particular issue because there now is an understanding, in quotes, by some members of the industry that the stock assessment really is wrong, that we have more spawners out there, and perhaps the quotas could even be increased. That is not the case; so are you in a position to let us know where the technical committee and where the stock assessment scientists are relative to dealing with this problem identified with the aging of menhaden in the context of the upcoming stock assessment.

DR. NESSLER: At the data workshop, if I might slightly correct your comments, the group found that our interpretation of previous published literature on maturity at age was incorrect. We discovered that by looking at maturity data that had been collected and analyzed by NEAMAP that indicated that age two menhaden, it may be as much as 80 percent of them are mature at age two; whereas, before we had I think it was something in the range of 15 percent; so a very big change.

When we saw that, we thought, oh, dear, is that a sampling issue or some sort of mistake. We went back to the original literature from the study that we had used in previous stock assessments to determine that maturity at age and basically we believe we misinterpreted the

definition of mature in that paper. The actual study was much more complex than what we actually used it for. The group decided that it appears that the maturity ogive was incorrect in the past assessment.

Now, to address the second part of your question as to how does affect the assessment, is it incorrect, I thought about this a little bit since that meeting. I think the board is most concerned about the overfishing condition given that as I understand it what prompted the amendment; and I reran the calculations for that F 15 percent threshold.

It does raise, as you would expect, the threshold from 1.3 to about 3.2. That being said, the terminal F from the assessment, as you recall, was 4.5; so we would still be overfishing. Of course, that being said, I think the technical committee had a lot of concerns with the model in general; and I think as far as procedurally it doesn't change what our stock status is for overfishing at the moment.

But to speak for the technical committee, if I may, I would suggest everyone to just hold tight. We have made so many so many changes to this assessment you won't recognize it, and I really can't predict what the ultimate outcome will be, but we should have that for you as soon as possible. Does that answer your question?

DR. PIERCE: Yes, thank you for correcting me. I was incorrect so thank you for that. It is work in progress and good work by those involved in the stock assessments and we await the new information and interpretation. Thank you.

MR. O'REILLY: Dr. Nessler, I think to hold tight is a good way to put it. However, by the spring meeting will we have some updates on important components of the assessment? The fishery-dependent component has been very important. I understand that the Virginia data cannot be

Draft of the Atlantic Menhaden Management Board Meeting Proceedings February 2014

used for CPUE. That was one of the decisions.

I know that we're bound by law retroactively to last year to develop an adult index; so I certainly would be very interested to know some more information on the dependent CPUE. Then to follow up on that, on the maturity ogive I guess it is an idea of we'll hold on, but it would seem that what I heard was that 10 percent is what was used in the past for age two and NEAMAP data is showing 90 percent maturity at age two. That is what I heard so you can correct me if you need to.

DR. NESSLAGE: I don't have the numbers in front of me. I probably should have brought them with me. I apologize; I will get those to you, Rob. If I have spoken incorrectly, I apologize, but it is a very drastic change, you are correct there. I believe we will be using the NEAMAP estimates going forward; so whatever they are – and they are in that very high range – we will be using those. I will leave it up to the chair as to whether or not we will be updating the board with preliminary stock assessment results at the next meeting.

CHAIRMAN BOYLES: We'll sit tight on that; we'll hold tight. Rob.

MR. O'REILLY: Just to follow up, I'm not sure I meant a full update. I realize the constraints, but there are certain things that – as Dr. Nesslerage said, this is going to look like a brand new process. If it does, it might be good just for the board to have some pre-finalization information as we go along on what this new process looks like; so that would be appreciated, if possible.

CHAIRMAN BOYLES: We will keep you apprised as we can. Bill.

MR. GOLDSBOROUGH: Mr. Chairman, I had two hopefully quick questions for Genny. First of all, the kinks that are being addressed in the MS-VPA; should I assume those are tightening up of the existing model and not making the changes like adding a fourth predator and the feedback loop and all that were anticipated?

DR. NESSLAGE: Yes; this is just updating the existing MS-VPA with some minor changes; no new major predators; and some corrections of some of the old prey inputs that we had. What we tripping up on at the moment is that we have the new striped bass assessment information and results that we're inputting into that model and it is causing some issues. There is an issue of scale and so we're having to figure out where that has gone wrong, but I think we're going to have that ironed out very soon; but no major model configurations changes, you're correct.

MR. GOLDSBOROUGH: So the estimates of predation mortality would still come out of the MS-VPA. My second question, Mr. Chairman, was with regard to the historic tagging data base. That data base, as I understand it, is 40-plus years old. I'm just wondering what the nature of the discussion has been about the appropriateness and the value of that data given that a lot of this happened over 40 years in the system and the dynamics and so forth; and noting that yesterday with respect to summer flounder, there were a couple of pretty strong comments about 15-year-old data being too old to really be useful.

DR. NESSLAGE: The first comment that you made, I may have nodded my head prematurely. You said that the MS-VPA outputs would be used in the single-species model. Yes, I think at this point the technical committee would like to have that as an option for consideration by the stock assessment subcommittee; but in the event that we can't iron those kinks, I think we will have some further discussion on what to do with that.

We discussed at length whether and how to incorporate that information; specifically how we would incorporate time-varying natural mortality prior to the beginning of the MS-VPA, which starts in '82; and so there may be some melding of two different methods.

Draft of the Atlantic Menhaden Management Board Meeting Proceedings February 2014

It sounds like if we can get the MS-VPA end matrix produced and we're confident in it, then it may be – the exact way in which it will be used in the model is not yet clear, but we're going to leave that up for the assessment workshop. Does that clarify your understand?

MR. GOLDSBOROUGH: Yes; I believe that clarifies with respect to my first question.

DR. NESSLAGE: Right; and the second question with the –

CHAIRMAN BOYLES: Can you repeat your second question?

MR. GOLDSBOROUGH: I was just wondering the nature of the discussion regarding the historic tagging data base with respect to its utility after 40-plus years.

DR. NESSLAGE: The technical committee was very excited about the availability of this data. It is old but to be honest, it is all we have; and if we want to build any sort of spatial consideration or structure into our stock assessment model, this is all the information that is available to us.

It sounds like at this point in our development we are at best going to at least start by creating a model that would have a north/south split; and it would be just north of the Chesapeake Bay. I don't think that the technical committee was concerned about changes on the order of magnitude where the migration rate is between the southern portion and northern portion would have changed so dramatically over the last 30 or 40 years that it would have been inappropriate to use those migration rates.

If we were going to get down to the finer details of how far menhaden are going between Connecticut and Rhode Island, I think we might be concerned; but at this point major shifts from the north/south sections of the range. I think the technical committee was at least confident in using it as a springboard to try and develop new models that would build in the spatial aspect of the migration of menhaden. Does that answer your question?

MR. GOLDSBOROUGH: Pretty much, but just then to clarify, you're still assuming a single stock?

DR. NESSLAGE: Absolutely.

CHAIRMAN BOYLES: Are there further questions for Genny? Genny, I know I speak for the board when I say we really appreciate the work that the technical committee is doing and the stock assessment subcommittee. It is a lot of work and a lot riding on that; so we will do what we can to support that. Please pass on our regards and our respect for their efforts. Is there any other business to come before the Menhaden Board? Bill.

OTHER BUSINESS

MR. GOLDSBOROUGH: Sorry, Mr. Chairman, I had hoped to get this comment in at the end of the Florida discussion just about looking forward to the May meeting, if I may. What we did was with respect to adaptive management and trying to solve a problem in the short term, but recognize that it is really an outgrowth of a more fundamental problem; that being not having very reliable baseline data for the '09 to '11 time period on the small-scale bait fisheries.

The reason I want to put this out there again is when Mike gave his remarks about what we're going to be doing, he referenced only the 2013 landings as being on the table in May. It seems to me from the discussion and from our discussion in Georgia that broader issue is also very important and fundamental to the problems that a number of states have been facing, including this one in Florida.

If it could be assumed then that we're going to include that as part of our discussion in May, which would mean any state that feels that their bait landings' data from the baseline period was not a correct reflection on what they really caught during that period, those that were assumed in the Amendment 2, should be urged to research

Draft of the Atlantic Menhaden Management Board Meeting Proceedings February 2014

the matter further and come up with any documentation they can as to what they think they really were for the discussion in May.

CHAIRMAN BOYLES: I think so, Bill. I think I'm going to ask Mike to confirm that. I think a fundamental question for us is one point during the discussion there was a motion on the floor to initiate the development of an addendum. Again, I go back to where we are and remind everybody about the very important stock assessment. These are important issues with these small-scale fisheries; and the board will have to consider is this something that we want to tackle but right up against development of that stock assessment. Mike, I'm going to turn it over to you to reiterate things about the compliance reports in May.

MR. WAINE: We can do just that. Through the compliance reports I am requesting the entire time series for the landings; and so I'll make sure I emphasize that if there are landings that have been updated historically, to note that. I have been in close conversations with those states that think there are changes going on from their records. I'll be able to identify that for the board.

MR. O'REILLY: I just have a question on what was just discussed. Landings change but is there going to be basis for why they changed; so, in other words, we deal with situations where you have to at least sometimes try and use VTRs in fisheries instead of having those landings at that time. I mean, that happens.

There are probably other formats where you want to know why the landings change; so I hope this isn't just simply that there has been a change of X amount of pounds in 1998 through 2012. I hope there is a model for this or a template for this on what the staff will have to let us know about the landings changes.

MR. WAINE: Yes; we will ensure that the integrity of those numbers are described in detail and why those changes occurred.

ADJOURNMENT

CHAIRMAN BOYLES: Is there further discussion? Seeing none; we will stand adjourned.

(Whereupon, the meeting was adjourned at 12:25 o'clock p.m., February 5, 2014.)

State of Maine: 2013 ASMFC Atlantic Menhaden Compliance Report

Introduction

The State of Maine has had a long history as a stakeholder in the Atlantic menhaden fishery. Following a number of years of low landings, the 2008 landings increased significantly. However, the 2013 landings were again extremely low. All of this Atlantic menhaden was utilized for bait in the recreational and lobster fisheries. Prior to the recent decline in landings, Maine had a relatively robust fishery. In the early 1990's Maine experienced large abundances of adult Atlantic menhaden in in-shore areas. Additionally Maine had almost 2,000 mt of landings as recently as 2008

Catch & Landings

Preliminary dealer reported 0 pounds landed for 2013.

Beginning in 2011, all Maine commercial harvesters are required to report Atlantic menhaden landings. A copy of this law is attached in Appendix (I).

Management

The Atlantic States Marine Fisheries Commission (ASMFC) manages the Atlantic menhaden Fishery in the Northeast Atlantic. Maine has adopted this plan and implemented all compliance criteria. In addition the State of Maine has enacted regulations on the inshore bait fishery. In brief, these regulations require gear marking, endorsement and reporting of all baitfish caught as well as a pilot program to limit the catch of Atlantic menhaden in certain areas. A copy of these regulations is attached in an Appendix (II). It should be noted that these regulations were amended in July 2013 as Maine initiated compliance measures with ASMFC Amendment 2.

Monitoring

Since 1995 Maine has been using beach seine surveys to monitor many juvenile fish species. To date Atlantic menhaden have never appeared in that survey. In 2000 the State of Maine, in concert with New Hampshire, started an autumn inshore bottom trawl survey to monitor adult and juvenile fishes. In that same year large numbers of small (young of the year) Atlantic menhaden were collected (Figure 1). Atlantic menhaden were not collected in the 2001 autumn survey and reappeared in 2002. Atlantic menhaden were absent in the autumn trawl series for 2004, reappeared in 2005, absent again in 2006 and reappeared again in 2007. Atlantic menhaden were again virtually absent in 2008. Two adults were caught in the spring survey. One off Pemaquid at 28 cm and one in upper Penobscot Bay at 27 cm. No fish have been caught in the fall survey since 2007. The trawl survey length frequency distributions are provided in Table 1 and Figure 2. The regional distribution is provided in Figure 3. The trawl survey has not caught any Atlantic menhaden since 2007 (Figure 1).

For commercial catch sampling Maine DMR has been collecting and sending samples to NMFS in Beaufort NC on a regular basis. Since 2007 Maine has sent 15 samples, 3 in 2007 (started sampling that June), 9 in 2008 (the year they came to Maine), 2 in 2009, and 1 in 2010.

Figure 1: Occurrence of Atlantic Menhaden in the Fall Inshore Bottom Trawl Survey 2000-2012

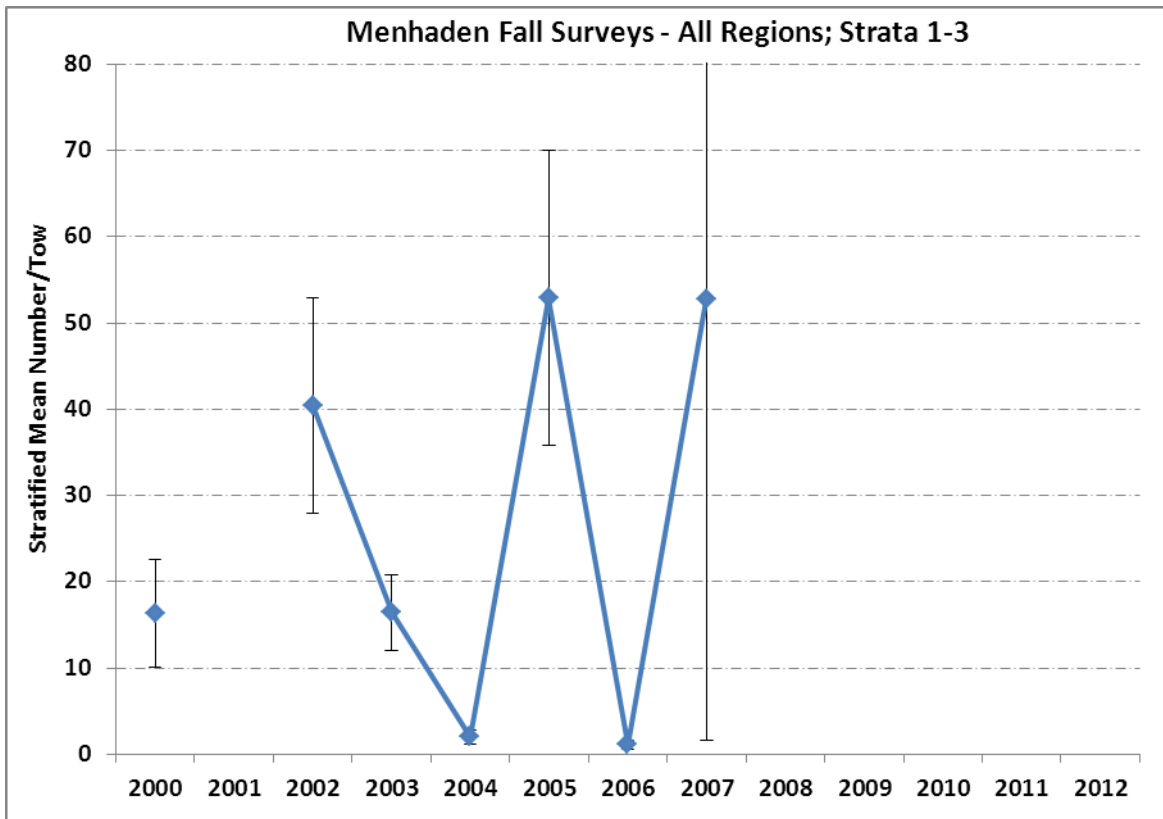


Table 1: Length Frequency Distribution By Year of Atlantic Menhaden Caught in the Fall ME/NH Inshore Trawl Survey

Lengths expanded for sub-sampling and standard towwlength

Length	Fall 2000	Fall 2001	Fall 2002	Fall 2003	Fall 2004	Fall 2005	Fall 2006	Fall 2007
1								
2								
3								
4								
5			4	98		48.67	1.111111	124.2
6	22		67	526		688.51		1600.021
7	340		142	346	3.68	1077.61	8.944444	1284.888
8	658		114	41	31.86	651.25	22.25	348.7909
9	431		57	8	75.71	259.15	7.25	72.41026
10	57		29	4	47.12	43.45		
11	11		2	2	10.51	3.58		
	1519	0	415	1025	171.1768	2772.219	39.55556	3430.31

Figure 2: Length Frequency Distribution By Year of Atlantic Menhaden Caught in the Fall ME/NH Inshore Trawl Survey

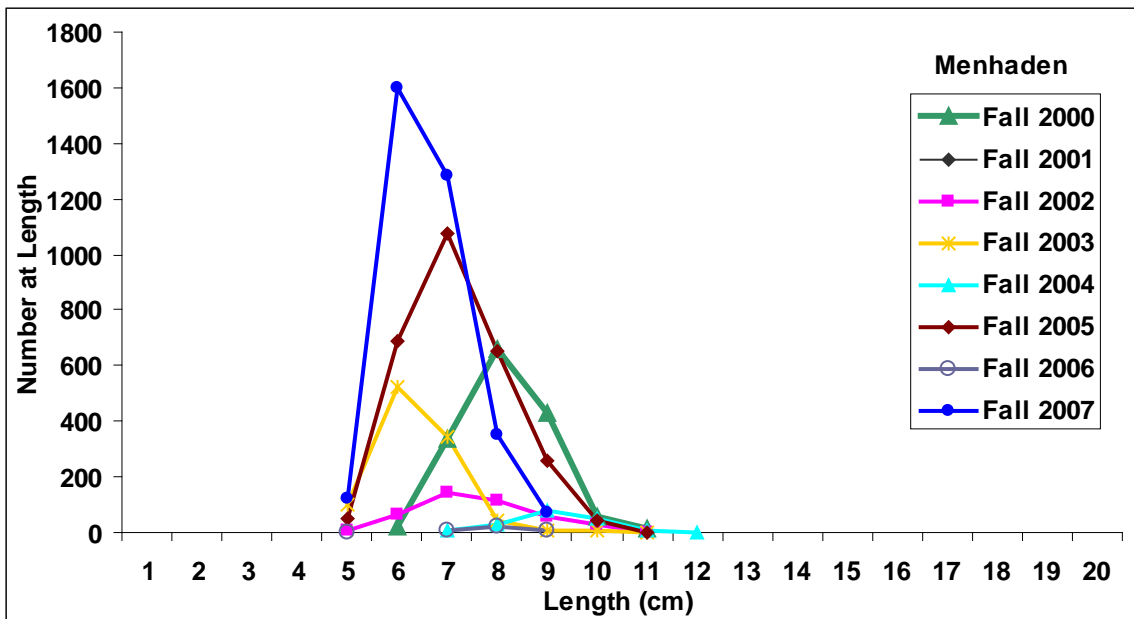
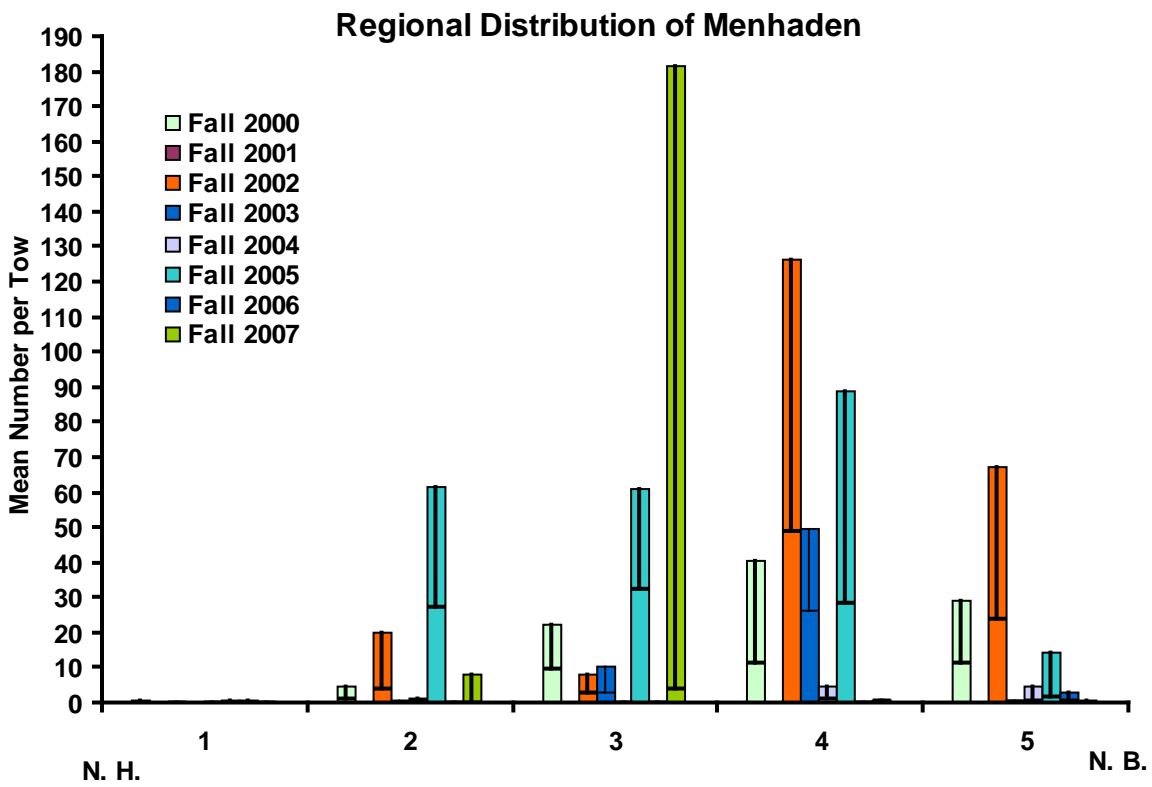


Table 2: Regional Distribution of Atlantic Menhaden



Appendix I

§ 6502-A. Commercial pelagic and anadromous fishing license

1. Definition. As used in this section, "pelagic or anadromous fish" means Atlantic herring, Atlantic Atlantic menhaden, whiting, spiny dogfish, alewife, Atlantic mackerel, blueback herring, squid, butterfish, scup, black sea bass, smelt and shad.

2. License required. A person may not engage in the activities authorized under this section without a current:

A. Commercial pelagic and anadromous fishing license for a resident operator;

B. Commercial pelagic and anadromous fishing license for a resident operator and all crew members; or

C. Commercial pelagic and anadromous fishing license for a nonresident operator and all crew members.

3. Licensed activity. The holder of a commercial pelagic and anadromous fishing license may fish for or take or possess, ship, transport or sell pelagic or anadromous fish that the holder has taken. The commissioner shall determine by rule what crew members may fish under a commercial pelagic and anadromous fishing license that provides for crew members. Rules adopted pursuant to this subsection are routine technical rules as defined in Title 5, chapter 375, subchapter 2A.

4. Exemption. The licensing requirement under subsection 2 does not apply to a person who fishes for, takes, possesses or transports any pelagic or anadromous fish that have been taken by speargun, harpoon, minnow trap or hook and line and are only for personal use.

5. Eligibility. A commercial pelagic and anadromous fishing license may be issued only to an individual.

6. Fees. Fees for commercial pelagic and anadromous fishing licenses are:

A. Forty-eight dollars for a resident operator;

B. One hundred twenty-eight dollars for a resident operator and all crew members; and

C. Five hundred dollars for a nonresident operator and all crew members.

7. Surcharges. The following surcharges are assessed on holders of commercial pelagic and anadromous fishing licenses issued by the department:

A. For a commercial pelagic and anadromous fishing license for a resident operator, \$50;

B. For a commercial pelagic and anadromous fishing license for a resident operator with crew, \$200; and

C. For a commercial pelagic and anadromous fishing license for a nonresident operator with crew, \$400.

The commissioner shall deposit surcharges collected pursuant to this subsection in the Pelagic and Anadromous Fisheries Fund established under section 6041.

8. Violation. A person who violates this section commits a civil violation for which a fine of not less than \$100 nor more than \$500 may be adjudged.

Appendix II

13-188 DEPARTMENT OF MARINE RESOURCES

Chapter 55: GEAR RESTRICTIONS

55.04 Maine Gillnet Bait Fishing Regulations

- A. License and Endorsement Requirement. It shall be unlawful to gillnet bait fish without a gillnet bait fishing endorsement from the Department of Marine Resources (DMR). To obtain the endorsement commercial license-holders must contact the DMR at (207) 633-9500 to obtain an appropriate logbook and to receive instruction in logbook maintenance and reporting in accordance with Chapter 55.04(C). Upon satisfactory completion of these requirements the annual endorsement will be affixed or applied to their license by DMR personnel. No additional charge will be applied to the commercial license or recreational fishers for the endorsement.

- B. Gear and Marking Requirements. It shall be unlawful to fish more than 2000 feet of bait gillnet in territorial waters. Bait gillnet shall have less than 3.5 inches diamond or square stretch mesh throughout the entire net. Bait gillnets must be clearly marked at each end with buoy sticks at least 4 feet in length. The license-holder's name, homeport and DMR endorsement number must be clearly displayed on every marking buoy.

41.30 Atlantic Menhaden Pilot Program

1. Areas
 - A. Bald Head Cliff to Cape Arundel Shoreward and westerly of a straight line starting at the easternmost point of Bald Head Cliff, Ogunquit to the southernmost point of Cape Arundel, Kennebunkport.
 - B. Biddeford Pool to Cape Elizabeth Shoreward and westerly of the territorial sea line, as identified on National Oceanic and Atmospheric Administration nautical chart 13286, starting at the easternmost point of Biddeford Pool, Biddeford following the territorial sea line to where the line intersects the southernmost point of land in Cape Elizabeth.
 - C. All Maine territorial waters outside the areas defined in Chapter 41.30(A) & (B) Shoreward of the territorial sea line, as identified on National Oceanic and Atmospheric Administration nautical charts, except for those areas defined in Chapter 41.30(A) & (B).

2. Definitions

- A. "Daily catch limit or Daily limit" For purposes of this section (Chapter 41.30) means a maximum of 120,000 lbs of menhaden possessed or loaded aboard from areas A and B between 00:01 AM to 11:59 PM. There is no daily catch limit or daily limit in Area C for harvester vessels.
- B. "Carrier vessel 120,000 lbs capacity" For purposes of measuring 120,000 lbs or capacity in a vessel hold the volumetric measure (in hogshead) of 120,000 lbs of menhaden is equivalent to ~98 hogshead. One hogshead equals 17.5 lb bushels. For consistency with 12 M.R.S. §6543 and §6544(3), multiplying 70 pounds (lb) per bushel by 17.5 bushels per hogshead equals 1225 lb. Therefore 120,000 lb divided by 1225 lb (or 17.5 hogshead) equals ~98 hogshead, which is within the 5 hogshead tolerance used in §6544(3).

3. Area Limitations

The areas in Chapter 41.30(1)(A, B & C) are restricted to the take, possession and transport of the Atlantic menhaden in accordance with the following regulations:

A. Limitations in Areas A & B

- (1) Harvester and Carrier Vessel Daily Catch Limit - It shall be unlawful for harvester vessels and carrier vessels to catch and possess greater than 120,000 lbs of menhaden per day.

B. Limitations in Area C

- (1) Carrier Vessel Daily Limit - It shall be unlawful for carrier vessels to possess greater than 120,000 pounds (lbs) of menhaden per day.

For purposes of this Section (Chapter 55.90) "daily catch" means a maximum of 120,000 lbs of menhaden possessed or loaded aboard from these areas between 00:01 AM to 11:59PM.

C. Limitations in all Areas A, B & C

- (1) It shall be unlawful for any harvester vessel that exceeds 50 feet in length overall to fish for, take or possess menhaden within these restricted areas.
- (2) It shall be unlawful for any carrier vessel to land more than 120,000 lbs of menhaden per day (00:01 AM to 11:59 PM) harvested from Maine Territorial waters, which includes Areas A, B & C.
- (3) A carrier vessel may transport and land menhaden once per day at a limit of 120,000 lbs capacity.

Exception: Any carrier vessel less than 70 feet length overall (LOA) is exempted from the number of landings per day limitation in Chapter 41.30(3)(C)(3).

(4) It shall be unlawful for any carrier vessel greater than 90 feet LOA to transport menhaden harvested from Areas A, B & C. Any carrier vessel greater than 70 feet but not to exceed 90 feet LOA must be measured, plainly marked at a maximum 120,000 lbs capacity or equivalent volume; or marked at the maximum vessel capacity if under 120,000 lbs, and sealed* by the State Sealer of Weights and Measures.

*Sealed means receipt of the applicable Fish Carrier Calibration Report and sticker, seal or appropriate marking affixed by the State Sealer of Weights and Measures or their designee. This documentation must be obtained prior to transporting menhaden taken from these areas.

4. Suspension of rules

The Commissioner has the authority to suspend all regulations in Chapter 41.30 in the event of a potential fish kill upon consultation with industry and Marine Patrol. Notice of rule suspension and duration shall be provided via the internet on the Department's web site and by email to industry members or telephone.

New Hampshire's Atlantic Menhaden Compliance Report 2013

I. Request for *de minimis*, where applicable.

- a. New Hampshire requests *de minimis* status for 2014.

No Atlantic menhaden were harvested or landed in New Hampshire during 2010, 2011, 2012, and 2013 which constitutes less than one percent of the coast wide commercial landings during those years. If the *de minimis* threshold was reached, New Hampshire Fish and Game Department has the ability to close the fishery.

II. Previous calendar year's fishery

Directed Fishery

- a. New Hampshire did not have a directed Atlantic menhaden fishery in 2013.

Bycatch Fishery

- a. New Hampshire had no reported bycatch of Atlantic menhaden in 2013.
- b. There was no Atlantic menhaden bycatch to analyze.

Episodic Event Set Aside

- a. New Hampshire had no episodic events in 2013.

III. Mandatory Monitoring Programs

- a. New Hampshire was exempt from timely reporting and monitoring programs. Commercial landings were reported by dealers via the dealer reporting system on a weekly, trip-level basis. Commercial harvest was reported by federally permitted vessels via federal vessel trip reports. A Coastal Harvest permit is required for state only licensed commercial harvesters and harvesters operating a vessel with federal permits that do not trigger federally mandated reporting . The Coastal Harvest permit has mandatory, monthly, trip-level reporting. Recreational catch and harvest was monitored via the NMFS Marine Recreational Information Program (MRIP). In 2013, there were no reported landings of Atlantic menhaden in New Hampshire via dealer reports. No harvest was reported by either Coastal Harvesters or recreational harvesters.
- b. New Hampshire state law (RSA 211.49) prohibits the use of mobile gear in state waters. As a result, the New Hampshire fleet does not have any vessels rigged for purse seining or bait seining.
- c. New Hampshire had no Atlantic menhaden commercial bait fishery to sample in 2013.
- d. New Hampshire had no pound net fishery in 2013.

IV. Planned management programs for the current calendar year

- a. There are no changes planned or deviations from Amendment 2 to the Interstate Fishery Management Plan for Atlantic Menhaden for 2014.
- b. New Hampshire is not required to conduct any fisheries independent monitoring for menhaden. The New Hampshire Fish and Game Department does, however, conduct an annual seine survey of its estuaries to monitor relative abundance of fish and certain crustaceans. Young-of-the-year menhaden relative abundance from this survey is presented in Table 2.

Table 2. Geometric mean catch per seine haul of Atlantic menhaden derived from monthly seine hauls at 15 stations in New Hampshire estuaries from June to November each year.

<u>Year</u>	<u>CPUE</u>	<u>STD</u>
1998	0.00	-----
1999	0.57	3.14
2000	2.15	8.45
2001	0.30	1.85
2002	1.37	7.31
2003	1.23	4.86
2004	0.19	0.97
2005	1.79	8.58
2006	1.16	4.58
2007	0.93	4.87
2008	0.09	0.65
2009	0.08	0.42
2010	0.00	-----
2011	0.02	0.15
2012	0.26	1.90
2013	0.00	-----

V. Law Enforcement Reporting Requirements

No law enforcement issues occurred during 2013.

2013 Massachusetts Compliance Report to the ASMFC for Atlantic Menhaden

[This Report Contains Confidential Data]

Prepared By:

Micah Dean

March 2014

MarineFisheries
Commonwealth of Massachusetts



Massachusetts Division of Marine Fisheries
Annisquam River Marine Fisheries Station
30 Emerson Ave
Gloucester, MA 01930

Atlantic Menhaden Compliance Report for Massachusetts

I. Request for *de minimis* status

- a. Massachusetts does not request *de minimis* status under the Interstate Fishery Management Plan for Atlantic Menhaden.

II. Previous calendar year's fishery

Directed Fishery

- a. *Commercial landings* - Massachusetts seafood dealers reported purchasing 2,310,488 pounds of menhaden in 2013, a 40% increase over the previous year (Table 1).
- b. *Fishery closure* - The Massachusetts portion of the coast-wide TAC was not reached in 2013 and the directed fishery did not close. However, for limited entry vessels, a 200,000-lb possession limit was implemented effective June 27, and a 6,000-lb possession limit was implemented effective July 6, to prevent exceeding the quota (see attached official notices for details). Open access participants were authorized up to 6,000 lbs throughout the year. Note that the quota trigger levels, trip limits, and limited entry qualification criteria changed between the emergency regulations effective in 2013 and the final regulations implemented for 2014 and beyond (see attached Code of Massachusetts Regulations for the final regulations).
- c. *Quota transfers* – Over 25% of the Massachusetts quota remained after the availability of menhaden in local waters was concluded. As such, Massachusetts authorized a transfer of 500,000 pounds of quota to the state of New York (see attached transfer letter).

Bycatch Fishery

- a. Since the directed fishery did not close in 2013, no bycatch fishery occurred. All commercial landings of menhaden are reported under the directed fishery.

Episodic Event Set Aside

- a. Massachusetts did not participate in the episodic event set aside in 2013.

III. Mandatory Monitoring Programs

- a. *Fishery dependent monitoring* - Since 2005, any Massachusetts dealer who purchases directly from fishermen has been required to report their purchases of menhaden, as well as all other marine species. These dealer-reported data provide a comprehensive account of Massachusetts landings and value of menhaden, but do not provide effort or area information (Table 1).

Beginning in 2010, all Massachusetts fishermen who do not already report their activity to the National Marine Fisheries Service (NMFS) were required to report trip-level catch and effort data to Massachusetts. When combined with Federal trip-level data (VTRs), these fishermen-reported data provide a comprehensive account of catch and effort for Massachusetts menhaden landings, including area-fished.

While both datasets are intended to encompass all menhaden landed in MA at either the trip or transaction-level, some discrepancies do exist between the two sources. For this reason, dealer records were used to determine total landings, as the reporting program has been in operation longer and dealers generally provide more accurate landings weights

- b. *Purse seine and bait seine vessels* – mandatory trip-level reporting is required for all Massachusetts fishermen, including purse seine or bait seine vessels.
- c. *Age and length data* – A large portion of the Massachusetts landings of menhaden in 2013 were harvested via purse seine from Rhode Island waters of Narragansett Bay. As in years past, RIDEM collected sufficient age samples to characterize this fishery. As such, MADMF did not attempt to collect additional samples, despite their landing port of Fall River, MA. Instead, MADMF focused their sampling effort on the smaller cast net/gill net fishery that supplies the recreational bait shops. It has often been easier to locate the schools of menhaden that these fishermen exploit than to intercept the fishermen themselves as they are unloading their catch. Therefore, when unable to collect a sample of fish from the fishery, MADMF samplers resorted to using the same gear (cast nets) to capture their own sample directly. In this way, MADMF collected three 10-fish samples of age and length data in 2013.
- d. *Pound net reporting* – Massachusetts commercial fishermen using pound nets (or any other gear) are required to report the total pounds landed per day, as well as the number of pound nets fished per day. A single 10-fish sample of age and length data was collected from this fishery in 2013.

IV. Planned management programs for the current calendar year

- a. The quota trigger levels, trip limits, and limited entry qualification criteria changed between the emergency regulations effective in 2013 and the final regulations implemented for 2014 and beyond (see attached Code of Massachusetts Regulations for the final regulations).
- b. There are currently no plans to change the monitoring programs for Atlantic menhaden fisheries in Massachusetts in 2014.

V. Law Enforcement Reporting Requirements

- a. There were no law enforcement issues with Atlantic menhaden in Massachusetts in 2013.



Paul J. Diodati
Director

Commonwealth of Massachusetts

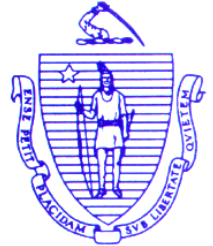
Division of Marine Fisheries

251 Causeway Street, Suite 400

Boston, Massachusetts 02114

(617)626-1520

fax (617)626-1509



Deval Patrick
Governor

Richard K. Sullivan, Jr.
Secretary

Mary B. Griffin
Commissioner

June 27, 2013

Marine Fisheries Advisory

Regulations Affecting Commercial Menhaden Management: Quota Management, Trip Limits and Permitting

This past winter, the Atlantic States Marine Fisheries Commission approved Amendment 2 to the Interstate Fishery Management Plan for Atlantic Menhaden. This Amendment implemented the first ever coast-wide commercial menhaden quota. The Commonwealth of Massachusetts has been allocated 0.84% of the overall quota. For 2013, Massachusetts' commercial menhaden quota is 3,126,019 pounds. To ensure that bait can be harvested locally and is available to commercial and recreational fishermen throughout the summer and fall, *Marine Fisheries* has filed emergency regulations implementing a quota management system.

Massachusetts' commercial Atlantic menhaden fishery will be managed as a two-tiered fishery. The first tier is an open access fishery; the second tier is a limited access fishery. In the open access fishery, any commercial permit holder will be authorized to possess and land up to 6,000 pounds of menhaden. In the limited access fishery, participants will be authorized to possess and land menhaden in quantities that exceed 6,000 pounds. Specifically, until 50% of the quota is landed there shall be no trip limit for limited access fishery participants; from the time when 50% of the quota is landed until 85% of the quota is landed, a 200,000 pound possession and landing limit will apply; once 85% of the quota is landed, the possession and landing limit will drop to 6,000 pounds. **As Massachusetts fishermen have already landed 50% of the quota, the 200,000 pound trip limit is now in effect for limited access fishermen.**

Both the open access and the limited access commercial menhaden fisheries will close when *Marine Fisheries* projects that 100% of the quota has been taken. A 1,000 pound menhaden bycatch tolerance will be allowed during the closed period provided the weight of the menhaden bycatch does not exceed 5% of the weight of the entire commercial catch being landed.

Marine Fisheries will notify commercial fishermen if they qualify to participate in the limited access fishery. Under the rules as proposed, entry would be limited to only those commercial fishermen who have dealer recorded sales transactions demonstrating they landed more than 6,000 pounds of menhaden during any trip in 2009, 2010 or 2011, or hold an limited entry regulated inshore net permit endorsement authorizing the use of purse seine gear to harvest menhaden. For 2013, access will be authorized through a Letter of Authorization. However, in all subsequent years the commercial permit holder must renew their limited entry menhaden permit endorsement.

All commercial menhaden landings must be reported on trip-level harvester reports – either through the *Marine Fisheries*' issued reports or federal vessel trip reports. This includes menhaden kept for personal use. In addition to harvester reporting requirements, all limited entry participants must hold a commercial bait dealer permit and report their commercial landings on a nightly basis – participation in this fishery is

contingent upon this reporting requirement. This will ensure that large scale landings are reported in a timely fashion.

A public hearing to codify these emergency rules is scheduled for July 29. For more information about commercial menhaden regulations and management please visit our website (www.mass.gov/marinefisheries). For a copy of the Atlantic menhaden regulations, please contact Jared Silva (jared.silva@state.ma.us; 617-626-1534).



Paul J. Diodati
Director

Commonwealth of Massachusetts

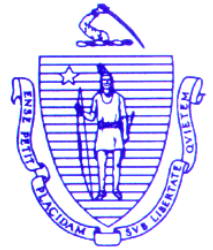
Division of Marine Fisheries

251 Causeway Street, Suite 400

Boston, Massachusetts 02114

(617)626-1520

fax (617)626-1509



Deval Patrick
Governor

Richard K. Sullivan, Jr.

Secretary

Mary B. Griffin

Commissioner

July 2, 2013

Marine Fisheries Advisory

Commercial Menhaden Trip Limit Reduced to 6,000 Pounds Effective July 6th, 2013

The Division of Marine Fisheries (*Marine Fisheries*) is projecting that commercial fishermen have harvested 85% of the state's commercial Atlantic menhaden quota. **In accordance with 322 CMR 6.43(4)(a)(2)(ii), the menhaden trip limit for all vessels will be 6,000 lbs per trip or per 24-hour day (whichever is longer) as of 00:01 hours on Saturday, July 6th.**

The commercial menhaden fishery will close when *Marine Fisheries* projects that 100% of the quota has been taken. Once the fishery is closed a 1,000 pound menhaden bycatch tolerance will be allowed, provided the weight of menhaden bycatch does not exceed 5% of the weight of the entire commercial catch.

This past winter, the Atlantic States Marine Fisheries Commission approved Amendment 2 to the Interstate Fishery Management Plan for Atlantic Menhaden. This Amendment implemented the first ever coast-wide commercial menhaden quota. The Commonwealth of Massachusetts has been allocated 0.84% of the overall quota. For 2013, Massachusetts' commercial menhaden quota is 3,126,019 pounds.

For more information about commercial menhaden regulations and management please visit our website (www.mass.gov/marinefisheries).

As a reminder a public hearing regarding the state's commercial menhaden management and permitting regulations will be held on Monday, July 29, 2013 at 5:00 PM at *Marine Fisheries* Annisquam River Station, 30 Emerson Avenue, Gloucester, MA 01930.

6.41: Further Regulation of Catches

(1) Commercial Possession of Parts of Fish. For purposes of determining compliance with the commercial possession limits specified in 322 CMR, the weight of filets and parts of fish, other than whole-gutted or gilled fish, will be multiplied by three. Notwithstanding the provisions of 322 CMR 6.03(3)(b) governing the possession of cod parts.

(2) Trip Limits for All Quota Managed Species. Except as otherwise specifically provided for in any provision of 322 CMR, all possession limits shall be per trip or per 24-hour day, whichever is the longer period of time. Commercial possession limits shall be vessel limits regardless of the number of permit holders or commercial fishermen permits or letters of authorization carried on board of the vessel.

6.42: Restrictions on Hook and Line Gears

Use of Natural Bait with Embedded or Attached Weights. It shall be unlawful for any person to fish with natural bait that has been rigged with embedded or attached weights or other materials, unless such weights or other materials are attached to the end of the fishing line.

6.43: Atlantic Menhaden Management

(1) Purpose. The purpose of 322 CMR 6.43 is to comply with the Interstate Fishery Management Plan for Atlantic Menhaden to manage the Atlantic menhaden fishery in a manner that is biologically, economically, socially and ecologically sound, while protecting the resource and those who benefit from it.

(2) Definitions.

Atlantic Menhaden means that species known as *Brevoortia tyrannus* or commonly referred to as pogy or bunker.

Bait Dealer means any person issued a bait dealer permit in accordance with 322 CMR 7.01(3)(g): *Bait Dealer*.

Bycatch means the non-targeted commercial catch and possession of a species.

Commercial Fisherman means any person fishing under the authority of a permit issued in accordance with 322 CMR 7.01(2): *Commercial Fisherman Permits*.

Declare means to file an advisory notification with the *Massachusetts Register* and publish it via the MarineFisheries electronic mailing list and website.

Director means the Director of the Division of Marine Fisheries.

Land means to transfer or attempt to transfer the catch of fish from any vessel to any other vessel or onto any land, pier, wharf, dock or other artificial structure, or for a fishing vessel with any fish on board to tie up to any dock, pier or other artificial structure.

Quota means the Commonwealth of Massachusetts' annual commercial Atlantic menhaden quota adopted by the Atlantic States Marine Fisheries Commission and amended by required paybacks and authorized quota transfers and rollovers.

Trip means the time period that begins when a vessel departs from any land, pier, wharf, dock or other artificial structure to carry out commercial fishing operations, including the at-sea transfer and transport of fish, and that terminates with a return to any land, pier, wharf, dock or other artificial structure.

(3) Regulated Fishery Permit Endorsement Requirement. It shall be unlawful for any fisherman or vessel to take, land, or possess Atlantic menhaden in excess of 6,000 pounds per trip or 24-hour day, whichever duration is longer, without a regulated commercial fishery permit endorsement for Atlantic menhaden issued by the Director, in accordance with 322 CMR 7.01(4)(a)4: *Renewals*.

6.43: continued

(4) Commercial Fishing Limits

(a) Regulated Fishery Trip Limits. Commercial fishermen who have been issued a regulated Atlantic menhaden fishery permit endorsement, in accordance with 322 CMR 6.43(3) and 7.01(4)(a)4.: *Renewals*, shall abide by the following trip limits:

1. Until the Director declares that 75% of the commercial menhaden quota has been landed, it shall be unlawful to possess or land more than 125,000 pounds of menhaden in the coastal waters of the Commonwealth per trip or calendar day, whichever duration is longer;
2. Once the Director has declared that 75% of the commercial menhaden quota has been landed, it shall be unlawful to possess or land more than 25,000 pounds of menhaden in the coastal waters of the Commonwealth per trip or calendar day, whichever duration is longer; and
3. Once the Director has declared that 95% of the commercial menhaden quota has been landed, it shall be unlawful to possess or land more than 6,000 pounds of menhaden in the coastal waters of the Commonwealth during per trip or calendar day, whichever duration is longer.

(b) Open Access Fishery Trip Limits. Commercial fishermen who have not been issued a regulated Atlantic menhaden fishery permit in accordance with 322 CMR 6.43(3) and 7.01(4)(a)4.: *Renewals* may possess and land up to 6,000 lbs of Atlantic menhaden per trip or 24-hour day, whichever duration is longer.

(c) Closure. It shall be unlawful to catch and retain or land Atlantic menhaden once the Director has declared that 100% of the quota has been harvested, except as provided at 322 CMR 6.43(4)(d).

(d) Bycatch Tolerance. When the commercial quota has been harvested and the commercial fishery is closed, commercial fishermen may possess or land up to 1,000 pounds of Atlantic menhaden bycatch per trip or per 24-hour day, whichever is longer. The weight of the Atlantic menhaden bycatch shall not exceed 5% of the weight of the entire catch being landed.

(5) Daily Catch Reporting. All regulated Atlantic menhaden fishery permit endorsement holders must obtain a bait dealers permit, as defined at 322 CMR 7.01(3)(g): *Bait Dealer*, and report to the Division of Marine Fisheries their directed commercial Atlantic menhaden landings in the Commonwealth on a daily basis on forms provided by the Director.

REGULATORY AUTHORITY

322 CMR 6.00: M.G.L. c. 130, §§ 2, 17A, 80, 100A and 104.

7.01: continued

(g) Bait Dealer. Authorizes the possession and sale of bait.

(4) Special Permits. The following special permits may be issued by the Director for the following activities:

(a) Regulated Fishery. Authorizes the named individual and/or a commercial fishing vessel to engage in the harvest, possession and landing of fish or shellfish from a fishery regulated pursuant to M.G.L. c. 130, § 17A, to be issued in addition to those permits required pursuant to 322 CMR 7.01(2).

1. State Waters Multispecies Groundfish Permit Endorsement. Authorizes only the named individual and/or vessel to harvest and possess for commercial purposes from waters under the jurisdiction of the Commonwealth the following species: cod, haddock, pollock, redfish, white hake, yellowtail flounder, winter flounder, windowpane flounder, American plaice, witch flounder, monkfish, ocean pout and wolffish.

a. State Waters Multispecies Groundfish Permit Endorsement Eligibility. The Director may issue a single State Waters Multispecies Groundfish Permit Endorsement to permit holders who held a state-issued commercial permit on November 4, 2004, renewed their permit in 2005, and are not authorized by a federal permit to take Multispecies Groundfish or monkfish. The Multispecies Groundfish Endorsement may only be issued as an endorsement on the state-issued commercial boat and lobster permits, but not the seasonal lobster permit.

b. Exceptions.

i. Limited Harvest of Multispecies Permit Groundfish in State Waters.

Notwithstanding permit prohibitions on the take of finfish described in 322 CMR, any state permitted commercial fisherman who does not hold a State Waters Multispecies Groundfish Permit Endorsement may take, possess and sell up to 75-lbs. of cod per vessel per 24-hour day harvested from waters under the jurisdiction of the commonwealth.

ii. Eligibility for Permit Holders Who Have Surrendered Their Federal Permits.

Notwithstanding permit prohibitions on eligibility described in 322 CMR 7.01(4)(a), the Director may issue a single State Waters Multispecies Groundfish Permit Endorsement to a state-issued commercial permit holder for a vessel that has been authorized by a federal permit to take Multispecies groundfish or monkfish if the permit holder has surrendered said federal permit to NOAA Fisheries.

c. Renewals. In 2007 and beyond, the Director may issue a State Waters Multispecies Groundfish Endorsement only to those commercial fishermen who received a State Waters Multispecies Groundfish Permit Endorsement in 2006 and renew their permits in accordance with 322 CMR 7.00.

2. Striped Bass. Authorizes only the named individual to harvest and possess striped bass for either commercial or non-commercial purposes in accordance with 322 CMR 6.07: *Striped Bass Fishery (Morone Saxatilis)*.

3. Gillnets. A regulated fishery permit shall be required to set, fish, or harvest any species by means of a gillnet.

a. Sink Gillnet Permit. Authorizes only the named individual and/or vessel to use a gillnet, anchored or otherwise, that is designed to be, capable of being, or is fished on or near the bottom in the lower third of the water column. Sink gillnet permits are limited to renewals only and are not transferable. Holders of sink gillnet permits may fish surface gillnets under the authority of their sink gillnet permit.

b. Surface Gillnet Permit. Authorizes only the named individual and/or vessel to use a gillnet, anchored, drifting or otherwise, that is designed to be, capable of being, or is fished in the upper two-thirds of the water column. Exemptions: No permit shall be required for fishermen using a surface gillnet less than 250 square feet.

4. Atlantic Menhaden. A regulated fishery permit shall be required to harvest, possess or land Atlantic menhaden for commercial purposes. This permit authorizes only the named individual and/or vessel to catch and retain or land more than 6,000 lbs. of menhaden.

7.01: continued

- a. Eligibility. For 2014, the Director may issue a single Atlantic Menhaden Regulated Fishery Permit Endorsement to a Massachusetts commercial fisherman permit holder, provided:
- i. there is valid documentation of landing more than 6,000 pounds of Atlantic menhaden in Massachusetts during any trip in 2009, 2010, 2011 or 2012; or
 - ii. the individual holds a commercial inshore net permit endorsement that authorizes the use of purse seines in the inshore net areas, as described at 322 CMR 4.02: *Use of Nets in Inshore Restricted Waters*; or
 - iii. the individual held a 2013 Coastal Access Permit, issued pursuant to M.G.L. c. 130, §§ 2 and 80 and 322 CMR 7.05, prior to July 1, 2013 or obtains a limited entry Coastal Access Permit through transfer, pursuant to M.G.L. c. 130, § 2 and 322 CMR 7.06, after July 1, 2013.
- b. Renewals. In 2015 and beyond, the Director may issue an Atlantic Menhaden Regulated Fishery Permit Endorsement to only those commercial fisherman permit holders who received an Atlantic Menhaden Regulated Fishery Permit Endorsement in 2013 and have renewed their permits in accordance with 322 CMR 7.00.
- (b) Non-commercial Lobster. The following requirements apply to the non-commercial taking of lobsters.
1. Pot. Issued to a named individual authorizing the harvest, possession and landing of lobsters by means of pots for non-commercial purposes by that individual or by members of that individual's immediate family residing in the same household.
 2. Diving. Issued to a named individual authorizing the harvest, possession and landing of lobsters by diving for non-commercial purposes by that individual only. A non-commercial lobster permit may not be carried on board any vessel fishing under authority of an offshore lobster permit.
- (c) Special Project. Authorizes only the named individual to engage in a specified marine fishery project, including but not limited to aquaculture or mariculture; scientific, environmental and biological collection and study, assessment or experimentation; collection and possession for education purposes; shellfish relay; and shellfish propagation.
- (d) Anadromous Fish Passageway. Authorizes the named individual to carry out activities related to the construction, reconstruction, repair, or alteration of any anadromous fish passageway, as defined in M.G.L. c. 130, §§ 1 and 19.
- (5) Application. Applicants for a permit shall comply with the following requirements:
- (a) Forms. Applications for a permit shall be on forms supplied by the Director. A separate application shall be made for each individual, boat, vessel, plant, firm, establishment, corporation, partnership or other business entity.
 - (b) Information. An application for a permit required by M.G.L. c. 130 and 322 CMR 7.01 shall contain and include the following:
 1. the name and address of the applicant;
 2. the date of birth of the applicant;
 3. the last four digits of either the applicant's social security number or federal identification number;
 4. for applicants for a commercial fishermen permit endorsed for shellfish, the applicant's Massachusetts driver's license number or Registry of Motor Vehicles identification number;
 5. the name of the commercial fishing vessel;
 6. the required length of the fishing vessel;
 7. the Massachusetts vessel registration number;
 8. the homeport of the commercial fishing vessel; and
 9. the true and accurate signature of the applicant;
 10. any other information sufficient to fully identify the particular activity to be undertaken and the intended use for the permit.
 - (c) Conditions. The following permit applicants shall comply with the following conditions:
 1. Master digger permit applicants shall submit with their application a valid bond as required by 322 CMR 7.02(2)(b);
 2. Dealer permit applicants shall submit with their application an approved health inspection certificate validly issued by the Department of Public Health pursuant to a health inspection of the applicant's premises;



Paul J. Diodati
Director

Commonwealth of Massachusetts

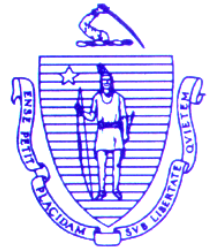
Division of Marine Fisheries

251 Causeway Street, Suite 400

Boston, Massachusetts 02114

(617)626-1520

fax (617)626-1509



Deval Patrick
Governor

Richard K. Sullivan, Jr.

Secretary

Mary B. Griffin

Commissioner

November 13, 2013

Mr. Robert Beal
Executive Director
Atlantic States Marine Fisheries Commission
1050 N. Highland Street, Suite 200 A-N
Arlington, VA 22201

Dear Bob,

This letter authorizes a transfer of 500,000 pounds of the Commonwealth of Massachusetts' 2013 commercial menhaden quota to the State of New York. Over 25% of Massachusetts' 3,126,019-lb quota remains while the season of menhaden availability in local waters has concluded. Our post-transfer quota level is expected to be more than adequate to account for any late reporting of directed menhaden harvest.

As per Amendment 2 to the instate menhaden plan, the Division of Marine Fisheries will consider this transfer request finalized upon your review.

Sincerely,

A handwritten signature in cursive script that reads "Paul J. Diodati".

Paul J. Diodati, *Director*

cc: Jim Gilmore (NYSDEC)
Toni Kerns, Mike Waine (ASMFC)



Rhode Island
Department of Environmental Management

DIVISION OF FISH AND WILDLIFE

3 Fort Wetherill Rd
Jamestown, RI 02835

401 423-1920
FAX 401 423-1925

MEMORANDUM

To: Michael Waine
Atlantic States Marine Fisheries Commission

From: Jason McNamee
RI Division of Fish and Wildlife

Date: April 5, 2014

Attached is the ASMFC Atlantic Menhaden Compliance Report for Rhode Island for 2013. The report describes the commercial harvest for the 2013 Atlantic Menhaden fishery (including the requested supplemental material). Included with the compliance report is a copy of our regulations regarding Atlantic Menhaden.

If you have any questions feel free to email me at jason.mcnamee@dem.ri.gov

2013 Menhaden Compliance Report for Rhode Island

I. Request for *de minimis*, where applicable.

Not applicable

II. Previous calendar year's fishery

Directed Fishery

- a. Commercial landings by year and major gear type is reported in the attached excel spreadsheet. Confidential landings are noted in red.
- b. After the promulgation of regulations to implement Amendment 2 to the Atlantic menhaden fishery management plan, RI now monitors two separate menhaden programs in state waters. The first is the quota as implemented by Amendment 2. RI's state waters quota was 74,557 lbs. The fishery was closed on July 28, 2013 as the RI TAC was completely harvested. The total landed prior to closing state waters for the year was 80,499, a 5,942 pound overage. On August 14, RI opted in to the episodic event set aside program. No landings were achieved during the Episodic event opening in 2013.

The second program operating in RI state waters is the pre-existing Narragansett Bay menhaden monitoring program. This program was initiated well before the implementation of Amendment 2 and will be continued even after Amendment 2s implementation. This fishery, which is specific to the area inside Narragansett Bay, opened on May 20, 2013. Narragansett Bay closed to the harvest of menhaden on June 10, 2013 because the biomass threshold, one of the triggers built in to the RI program, was hit. The fishery reopened on June 17, 2013. Narragansett Bay closed on July 7 for the remainder of the season.

- c. RI did not participate in a quota transfer in 2013.

Bycatch Fishery

- a. Bycatch landings that occurred after the state waters fishery closed are reported in a separate excel spreadsheet attached to this document.
- b. The bycatch harvest occurred almost exclusively from the floating fish trap gear type. No daily landing event was in excess of 6,000 lbs. The total landed as bycatch for the year was 15,200 pounds.

Episodic Event Set Aside

- a. On August 14, RI opted in to the episodic event set aside program. No landings were achieved during the Episodic Event opening in 2013.

III. Mandatory Monitoring Programs

- a. In 2013 RI monitored landings through the electronic dealer reporting system called the Standard Atlantic Fisheries Information System. Commercial harvesters are also required to report trip level data in their harvester catch and effort logbook.
- b. All commercial harvesters are required to fill out a catch and effort logbook to the trip level in RI. The purse seine fishery that occurs in RI state waters in Narragansett Bay is required to call in daily reports to the RI Division of Fish and Wildlife.
- c. RI collected over 100 fish during the sampling season in 2013, though only 74 were able to be processed for ages. The samples were collected from both the floating fish trap gear type and the purse seine gear type.
- d. Both the total pounds (lbs) landed per day and the number of floating fish traps fished per day were collected and were mandatory reporting elements in 2013 in RI.

IV. Planned management programs for the current calendar year

- a. RI fully implemented Amendment 2 in state waters in 2013, with the exception of the November 1st Episodic Event program termination date. It is RI's intent to implement the November 1st termination date in 2014 prior to the commencement of the fishing season.
- b. RI's monitoring programs were implemented in 2013 including the age and length sampling program, the Narragansett Bay seine survey, the Coast Pond seine survey, and the RI Division of Fish and Wildlife trawl survey. All survey data was reviewed for the stock assessment.

V. Law Enforcement Reporting Requirements

Not applicable



STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

BUREAU OF NATURAL RESOURCES
FISH AND WILDLIFE
&
LAW ENFORCEMENT

RHODE ISLAND MARINE FISHERIES STATUTES AND REGULATIONS

Part XVI Menhaden Regulations



November 8, 2013

AUTHORITY: These regulations are adopted pursuant to Title 20, Chapters 42-17.1, 42-17.6, and 42-17.7, and in accordance with Chapter 42-35, Administrative Procedures, of the Rhode Island General Laws of 1956, as amended.

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

BUREAU OF NATURAL RESOURCES

FISH AND WILDLIFE
&
LAW ENFORCEMENT

**RHODE ISLAND MARINE FISHERIES
STATUTES AND REGULATIONS**

TABLE OF CONTENTS

RULE #1 PURPOSE..... 3

RULE #2 AUTHORITY 3

RULE #3 ADMINISTRATIVE FINDINGS 3

RULE #4 APPLICATION 3

RULE #5 REGULATIONSPart XVI, p 4 - 7

RULE #6 SEVERABILITY..... 3

RULE #7 SUPERSEDED RULES AND REGULATIONS 3

RULE #8 EFFECTIVE DATE PAGE..... 8

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

BUREAU OF NATURAL RESOURCES

FISH AND WILDLIFE
&
LAW ENFORCEMENT

**RHODE ISLAND MARINE FISHERIES
STATUTES AND REGULATIONS**

PURPOSE

The purpose of these rules and regulations is to supplement and simplify and/or clarify existing regulations in order to more efficiently manage the marine resources of Rhode Island.

AUTHORITY

These rules and regulations are promulgated pursuant to Title 20, Chapter 42.17.1, 42-17.6, and 42-17.7, and in accordance with Chapter 42-35, Administrative Procedures, of the Rhode Island General Laws of 1956, as amended.

ADMINISTRATIVE FINDINGS

Rules and regulations are based upon the need to modify existing regulations (RIGL 20-3-2 through 20-3-6).

APPLICATION

The terms and provisions of these rules and regulations shall be liberally construed to permit the Department to effectuate the purposes of state law, goals, and policies.

DEFINITIONS

See Rhode Island Marine Statutes and Regulations, Part I, '1.3.

SEVERABILITY

If any provision of these Rules and Regulations, or the application thereof to any person or circumstances, is held invalid by a court of competent jurisdiction, the validity of the remainder of the Rules and Regulations shall not be affected thereby.

SUPERSEDED RULES AND REGULATIONS

On the effective date of these rules and regulations, all previous rules and regulations, and any policies regarding the administration and enforcement of Part XVI shall be superseded.

**R.I. Marine Fisheries Statutes and Regulations
PART XVI - MENHADEN REGULATIONS**

16.1 Prohibition on the Harvesting of Menhaden for Reduction Processing – The taking of menhaden for reduction (fish meal) purposes is prohibited in Rhode Island waters. A vessel will be considered in the reduction (fish meal) business if any portion of the vessel's catch is sold for reduction. (RIMF REGULATIONS) [Penalty - Part 3.3; (RIGL 20-3-3)]

16.2 Narragansett Bay Menhaden Management Area – Narragansett Bay, in its entirety, is designated a Menhaden Management Area. The area shall include the east and west passages of Narragansett Bay, Mt. Hope Bay, and the Sakonnet River, and be bordered on the south by a line from Bonnet Point to Beavertail Point to Castle Hill Light. The southern boundary further extends from Land's End to Sachuest Point and then to Sakonnet Light. The following regulations govern all commercial menhaden operations conducted in the Narragansett Bay Menhaden Management Area.

16.2.1 Gear Restrictions --The use of purse seines shall be permitted only in accordance with the following terms and conditions:

(A) All nets shall be less than 100 fathoms (600 feet) in length and less than 15 fathoms (90 feet) in depth.

(B) All nets shall be marked with fluorescent-colored float buoys, distinguishable from the other float buoys on the net, at intervals of 50 feet.

(C) Annually, prior to use, all nets shall be inspected and certified as being in conformance with the provisions of this section by the DEM Division of Law Enforcement. Once inspected and certified, a net may be used throughout the duration of the calendar year in which it was inspected, provided that it is not altered with regard to any of the provisions of this section. Any net that is altered with regard to any of the provisions of this section must be re-inspected and recertified prior to use.

16.2.2 Vessel Restrictions – When engaged in the commercial menhaden fishery, vessels may not have a useable fish storage capacity greater than 120,000 pounds. Prior to the commencement of fishing, for any vessel not previously certified through this process, each vessel must be inspected by a certified marine surveyor and assessed with regard to its fish storage capacity. A document reflecting the assessment must be kept aboard the vessel at all times. Any vessel with a fish storage capacity greater than 120,000 pounds may only engage in the fishery if the excess capacity is rendered unusable in accordance with the specifications set forth in the assessment.

16.2.3 - Possession Limits

(A) When the commercial menhaden fishery opens, per section 16.2.5 of this part, the possession limit shall be 120,000 pounds per vessel per calendar day, per section 16.2.5. The possession limits may be modified by the DEM Division of Fish & Wildlife (DFW) on the basis of the estimated weekly standing stock of menhaden in the management area derived, in accordance with section 16.2.5, via approved scientific monitoring methods.

(B) No commercial menhaden fisher shall possess menhaden or otherwise engage in the taking of menhaden anytime on Saturday, Sunday, on any official state holiday, or prior to sunrise or following sunset.

16.2.4 Reporting Requirements -- In order to permit the Department of Environmental Management to monitor the fishery, any fisher intending to engage in the commercial menhaden fishery shall notify the DEM Division of Law Enforcement (DLE) at (401) 222-3070 prior to taking or coming into possession of menhaden in the management area. At the time that a fisher advises the DLE of his/her intent to harvest menhaden, the DLE shall notify said fisher of any modification which may have been established in the possession limit for menhaden. Each commercial menhaden fisher shall also contact the Division of Fish and Wildlife at (401) 423-1943 at the end of each trip to report the amount of menhaden in possession by the fisher in pounds and area fished.

16.2.5 Opening/Closure of Fishery Based on Biomass Estimates –

(A) **Biomass “Floor”**. On an annual basis beginning every spring, the DFW, utilizing approved scientific monitoring methods, shall conduct regular estimates of the weekly standing stock of menhaden present in the management area. On the basis of those estimates, the DFW shall issue a notice when the estimated weekly standing stock reaches a threshold of 1,500,000 pounds, and the DFW shall open the commercial fishery, at an initial possession limit of 120,000 pounds per vessel per calendar day, when the estimated weekly standing stock reaches 2,000,000 pounds. If, at any time, the stock estimate drops below 1,500,000 pounds, the DFW shall close the commercial fishery until further notice.

(B) **Biomass “Ceiling”**. When 50% of the estimated weekly standing stock of menhaden stock present in the management area, above the minimum threshold amount of 1,500,000 pounds, is harvested, the DFW shall close the menhaden fishery until further notice.

16.2.6 Permanent Closures -- The following areas are permanently closed to purse seining for menhaden:

Providence River

- All waters north of a straight line running from Rocky Point to Conimicut Light to Nayatt Point.

Greenwich Bay

- All waters in Greenwich Bay west of a line from the flag pole on Warwick Point to Sandy Point.

16.2.7 [Repealed 4/2011]

16.2.8 Harvest of Menhaden in Permanently Closed Areas – No person harvesting menhaden by any fishing method shall possess more than 200 menhaden per vessel per calendar day in any closed area of the menhaden management area as set forth above.

16.3 Landing of Menhaden in RI Under State Quota Program – A total annual statewide quota for menhaden is hereby established. It shall be the most recent allocation as established for the State by the Atlantic States Marine Fisheries Commission (ASMFC). The quota shall pertain solely to landings of menhaden in RI. The quota shall not pertain to the possession of menhaden in RI waters prior to landing. The quota may only be harvested and landed by fishermen licensed and vessels duly authorized in accordance with the provisions of Title 20 of the General Laws and in accordance with all rules and regulations promulgated by the Department of Environmental Management. The State's menhaden quota will be managed as follows:

16.3.1 -- The landing limit for menhaden in RI will be unlimited until the quota has been reached, as determined by the Division. Once the quota has been reached: (i) the landing limit will be zero for vessels associated with directed fisheries for menhaden, including but not limited to purse seine operations, and (ii) the landing limit will be 6,000 pounds per vessel per day for all vessels not associated with directed fisheries for menhaden.

16.3.2 – All commercial menhaden operations conducted in the Narragansett Bay Menhaden Management Area, prior to and after the State's quota has been reached, are subject to the provisions of section 16.2.

16.4 – Episodic Event Set Aside Program –

(A) After the State's quota has been reached, if RI is approved to participate in the Episodic Event Set Aside Program for Menhaden, as established by the ASMFC, the landing limit for menhaden will be 120,000 pounds per vessel per day for vessels associated with directed fisheries for menhaden, until the Set Aside has been exhausted, as determined by the ASMFC and/or the Division, at which time the program will end and the directed fishery will close. Vessels who target and land menhaden in RI under this program must harvest only from RI waters and, if operating in the Narragansett Bay Menhaden Management Area, must adhere to all of the provisions governing the Narragansett Bay Menhaden Management Area, as set forth in section 16.2.

(B) Reporting Requirements -- Any commercial fisher intending to target

menhaden under the Episodic Event Set Aside Program for Menhaden must notify the DEM Division of Law Enforcement (DLE) at (401) 222-3070 prior to taking or coming into possession of menhaden. At the time that a fisher advises the DLE of his/her intent to harvest menhaden, the DLE shall notify said fisher of any modification to the possession limit for menhaden that is applicable to operations conducted in the Narragansett Bay Menhaden Management Area. Each said fisher shall also contact the Division of Fish and Wildlife at (401) 423-1940 at the end of each daily trip or within four hours thereof to report the amount of menhaden landed by the fisher in pounds. These menhaden-specific reporting requirements are in addition to all other existing commercial fishing reporting requirements as set forth in the RI Marine Fisheries Statutes and Regulations.

(C) Vessels not associated with directed fisheries for menhaden may continue to harvest and land in RI up to 6,000 pounds per vessel per day as bycatch. Such vessels are not subject to the provisions of sub-sections 16.3.2(A) and (B), but are subject to the provisions of section 16.2 with regard to operations conducted in the Narragansett Bay Menhaden Management Area, and are subject to all existing commercial fishing reporting requirements as set forth in the RI Marine Fisheries Statutes and Regulations.

16.5 – No fisher may transfer or attempt to transfer menhaden to another fisher.

Rule 8. EFFECTIVE DATE

The foregoing rules and regulations Rhode Island Marine Statutes and Regulations, after due notice, are hereby adopted and filed with the Secretary of State this **8th day of November, 2013** to become effective 20 days from filing, unless otherwise indicated below, in accordance with the provisions of Title 20, Chapters 42-17.1, 42-17.6, and 42-17.7, and in accordance with Chapter 42-35, Administrative Procedures, of the Rhode Island General Laws of 1956, as amended.

Janet L. Coit, Director
Department of Environmental Management

Notice Given: 07/16/2013
Public Hearing: 08/15/2013

Filing date: 11/08/2013
Effective date: 11/28/2013

ERLID# 7386

**State of Connecticut
Compliance Report for Atlantic Menhaden
April 04, 2014**

I. Introduction

Summary of the year highlighting any significant changes in monitoring, regulations or harvest.

In April of 2013, Connecticut enacted a Menhaden implementation plan and passed a declaration (see declaration # 13-06) that effectively prohibits a directed fishery from occurring within the state. The declaration prohibits possessing or landing more than 6000 lbs in a single day as well as the transfer of more than 6,000 pounds of menhaden between vessels. However, the declaration does provide a mechanism for out-of-state vessels wishing to land large quantities (> 6000 lb) in Connecticut provided a quota transfer from its home state is arranged in advance. No quota transfers took place in 2013. Connecticut's 2013 TAC was 64,900 lbs, or 0.02% of the coastwide quota. Connecticut commercial landings for 2013 were 6,703 lbs. This was more than 82% decrease from 2012 and more than 90% decrease from the proceeding five year average of 76,532 lbs. During the last three years, landings have been well below average. The majority of reported menhaden landings in Connecticut come from vessels fishing gillnets inside state waters for lobster bait. Since 2008, gillnet landings in Connecticut have dropped by 94%.

II. Request for *de minimis*, where applicable.

Not Applicable.

III. Previous calendar year's fishery and management program.

a. Activity and results of fishery dependent monitoring.

Atlantic menhaden landings are monitored through monthly commercial fishermen logbooks, and weekly and monthly dealer reports. These reports contain daily records of fishing and dealer purchase activity including gear type and area fished. There was no commercial sea sampling or port sampling activity for Atlantic Menhaden in Connecticut during 2013. However, biological samples were taken onboard the R/V John Dempsey with the assumption that the same size and age class fish would be available to the shrinking commercial menhaden bait fishery in Long Island Sound. Preliminary commercial landings for 2013 only totaled 6,703 pounds; a 82% decrease from 2012 and 20,226 pound or 75% decrease from the 2011 (Table 1). Over the last several years, decreasing effort in the Long Island Sound lobster fishery has resulted in a sharp drop in menhaden landings. Many of Connecticut's commercial lobster fishermen were at one time responsible for the majority of the bait landings in the state. Since 2000, there have been three events (2002, 2006, and 2009) that have resulted in higher total Connecticut landings. In each of these three years, landings were reported from catches occurring from outside of state waters and offloading in a Connecticut port. In April of 2013, Connecticut enacted a Menhaden implementation plan and passed a declaration (13-06) that effectively prohibits a directed fishery from occurring within the state (see Section IV a.).

Table 1. Total Connecticut Commercial Landings (pounds), 2000-2013. *Source: CT Marine Fisheries Statistics Program*

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013*
14,423	38,865	1,138,788	46,515	33,210	30,636	866,235	90,254	104,881	170,907	42,489	26,929	37,454	6,703

*preliminary as of April 2014.

b. Activity and results of fishery independent monitoring.

The state of Connecticut conducts the Long Island Sound Trawl Survey (LISTS) each spring (April-June) and fall (September and October). This survey provides fishery independent monitoring of important finfish species as well as other marine living resources. Atlantic menhaden are commonly observed in LISTS fall surveys, with few fish seen during spring cruises, however, in 2012 and 2013, LISTS did observe more adults in the 27-31cm range. Typically LISTS has averaged about 400 menhaden per year and average abundance in the fall is 0.68 fish/tow (Table 2). Over sixty percent of LISTS menhaden catches during the fall are juveniles. Abundance was generally lower in the early part of the time series from 1984 through 1991, and then increased sharply in 1992 to record levels (2.0 fish/tow)

	Long Island Sound Trawl Survey		Connecticut River Seine Survey	Thames River Seine Survey
	Spring	Fall		
1984	0.09	0.23		
1985	0.11	0.15		
1986	0.18	0.79		
1987	0.39	0.14		
1988	0.17	0.13	0.38	
1989	0.14	0.45	4.10	
1990	0.10	0.66	2.68	
1991	0.03	0.59	8.92	
1992	0.14	2.00	16.35	
1993	0.07	0.40	3.55	
1994	0.05	1.02	2.58	
1995	0.11	0.56	0.95	
1996	0.02	0.43	6.01	
1997	0.02	0.57	5.11	
1998	0.00	0.73	27.54	24.11
1999	0.01	1.08	5.25	57.45
2000	0.03	0.97	7.44	50.25
2001	0.00	0.32	7.63	2.38
2002	0.13	0.76	9.15	119.58
2003	0.01	0.95	25.61	41.41
2004	0.02	1.63	10.80	5.39
2005	0.01	0.94	0.92	1.19
2006	0.04	0.23	0.34	6.08
2007	0.13	0.80	5.54	6.26
2008	0.05	0.47	0.23	0.35
2009	0.07	0.28	1.17	2.68
2010	0.05		0.43	0.20
2011	0.11	0.74	0.23	0.73
2012	0.63	0.94	0.53	2.63
2013	0.37	0.39	0.65	0.14

(Figure 1). Abundance varied around the mean for the next eight years and decreased again in 2001 to 0.32 fish/tow. After three years of moderately increasing abundance during 2002 through 2004, menhaden indices dropped to the fifth lowest in 2006 (0.23 fish/tow) and rose in 2007 to 0.80 fish/tow. Abundance has varied around the mean in the last six years and was slightly above the mean in 2011 (0.74 fish/tow) and 2012 (0.94 fish/tow).

The Connecticut Marine Fisheries Division conducts a Connecticut River Seine Survey and calculates a juvenile Atlantic menhaden index based on the lower four stations, i.e. from Glastonbury, CT to Essex, CT, near the river mouth. The Seine Survey maintains twenty-seven years of menhaden data and has shown three major peaks in abundance in 1992 (16.35 fish/haul), 1998 (27.54 fish/haul), and 2003 (25.61 fish/haul) (Table 2.). Since the most recent peak in

2003, abundance fell sharply to 0.34 fish/haul in 2006 then increased modestly the following year to 5.54 fish/haul. Abundance again fell over the last few years to the lowest in the time series in 2011 (0.23 fish/haul) and increased this past season to 0.65 fish/haul (Figure 2).

The Marine Fisheries Division also conducts a Thames River Seine Survey, and like the Connecticut River Survey, calculates a juvenile Atlantic menhaden index of abundance based on sites located between Norwich, CT to the river mouth. Both of these Seine Surveys are standardized to a fourteen week period between mid-July to mid-October (week # 29-42). This Survey has a sixteen year time series with high abundances seen for the first three years in 1998 through 2000 (averaging 44 fish/haul, Figure 3.). Over 1 million fish were observed in 2000 followed by less than 5,000 fish in 2001 (2.38 fish/haul). During 2002, abundance peaked with 119.58 fish per haul and above average the following year to 41.14 fish per haul. Since 2003 abundance has averaged 2.57 fish per haul.

Figure 1. Atlantic Menhaden indices from the Long Island Sound Trawl Survey, Fall 1984-2013

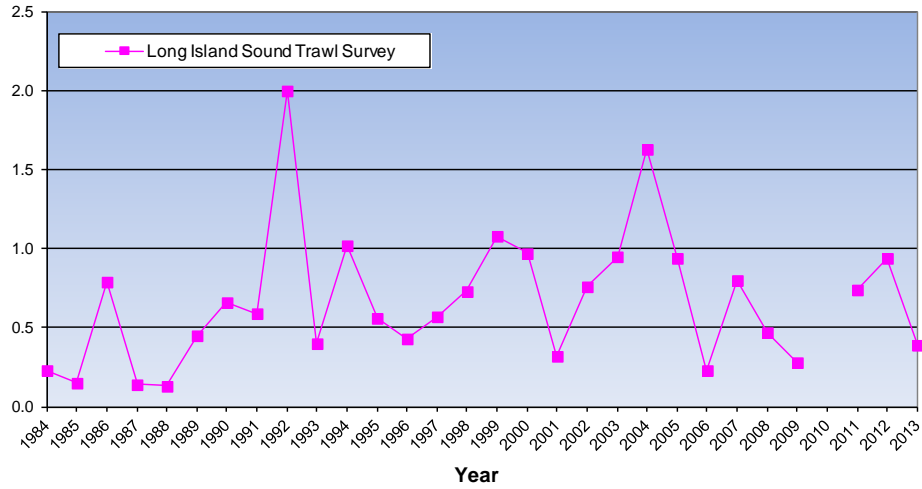


Figure 2. Juvenile Menhaden indices from the Connecticut River Seine Survey, 1987-2013 (Lower 4 Stations)

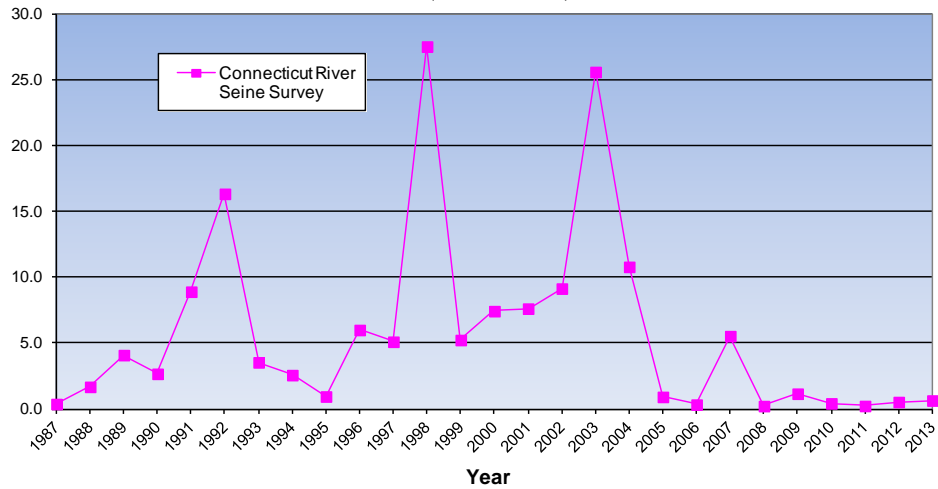
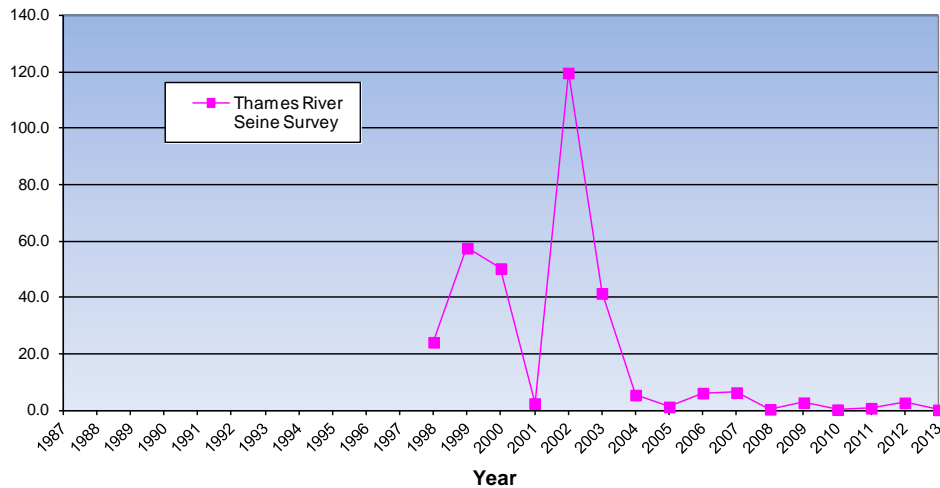


Figure 3. Juvenile Menhaden indices from the Thames River Seine Survey, 1998-2013



c. Copy of regulations that were in effect, including a reference to the specific compliance criteria as mandated in the FMP.

The use of purse seines to take any species was prohibited by state statute effective April 25, 2000. Other regulations in effect defined menhaden as a species that can be offered for sale as bait for licensing purposes (see Appendix 1, 26-142a-12), and included menhaden as a species that can be taken for personal use without a commercial fishing license while using certain gears (26-142a-15). Licensed fishermen are required to submit trip reports of their catches, which have been incorporated into the landings information provided below (26-157b-1). State statutes permit the use of a single gillnet not more than 60 ft in length in marine waters to take menhaden only, for personal use under a Personal Use Gillnet License (sec. 26-142a). Connecticut declarations in effect during 2013 regarding commercial and recreational take of menhaden are listed in appendix 1. Specifically, declaration of regulation change 13-06; persons engaged in commercial fishing shall not possess or land Atlantic menhaden in excess of 6,000 lbs. Recreational measures that were in effect for menhaden are included in declaration of regulation change 13-05; no person shall possess in excess of 50 fish or 5 gallons of menhaden, whichever is greater

Finally, a mandatory biological sampling program to collect age and length data from the commercial bait harvest to support improved stock assessments (Biological Data 3.6.2.1) was enacted through Connecticut's Implementation Plan for Compliance of Amendment 2 to the FMP (Appendix 2). Specifically a one 10-fish sample (age and length) per 300 metric tons landed for bait purposes for ME, NH, MA, RI, CT, NY, NJ, DE is required. Since Connecticut has so few active gillnetters fishing for menhaden as lobster bait in the last three years, it has become particularly difficult to sample the commercial fishery. Staff biologists routinely collect finfish ageing structures onboard the R/V John Dempsey as part of the Long Island Sound Trawl Survey. With the assumption that the same size and age class fish would be available to the shrinking commercial menhaden bait fishery within the Sound, these samples could be used as part of the required biological monitoring. More likely these samples will be used as a Northern regional component for fishery-independent Surveys in the upcoming benchmark assessment. Field staff collected and aged forty-eight samples in the spring of 2013 and comparative ageing between the Connecticut lab and the NMFS Beaufort lab is currently in progress. Connecticut plans to continue contributing samples/data as a source for the Northern fishery-independent component of the assessment. Both spring and fall samples will be collected in 2014.

d. Harvest broken down by commercial (by gear type where applicable) and recreational, and non-harvest losses.

A total of 6,703 pounds of Atlantic menhaden were landed in Connecticut during 2013 (preliminary). The gillnet fishery typically accounts for the majority of catches in Connecticut and most menhaden are used for lobster bait. In 2013, the gillnet fishery accounted for nearly 100% of the landings. Larger than normal landings in 2009 and 2006, as well as the unusually high landings in 2002 (Table 1) were due primarily to vessels fishing outside of state waters, and Long Island Sound proper, then traveling to a Connecticut port to offload. Historically, the gillnet fishery accounted for more than three quarters of the landings while the trawl, purse seine (outside state waters), and pound net compose the remainder. Hook and line normally contributes less than 1% of what is reported annually. A small percentage of cast net landings have also been reported in Connecticut each year since 2006. Currently the 2012 and 2013 recreational harvest data by personal use gillnet has not been fully entered into the Marine

Fisheries database; however, the 2011 landings were 7,200 lbs. The average landings for the previous seven years (2004-2010) under this license type have been 19,368 lbs. The recreational harvest by hook (snagging) is unknown as all herring species are grouped in the MRFS Survey and a single value for all species combined is provided.

There is no information available concerning non-harvest losses.

e. Review of progress implementing habitat recommendations.

Not applicable.

IV. Planned management programs for the current calendar year.

a. Summarize regulations that will be in effect.

There are no regulations restricting the season or fish size taken in the Atlantic menhaden fishery. State statutes prohibit the use of purse seines to take any species, therefore menhaden take in state waters is essentially limited to gillnets which have produced very modest landings in recent years. Gillnets in the commercial fishery must have a 3" minimum mesh size. Since 2007, regulations concerning commercial fishing gear specifications have required that gill nets fished under the personal use gill net license be personally attended by the licensee (26-142a-6). Currently, Connecticut does not have active pound nets that are authorized to be fished in state waters. Setting a pound net in Connecticut requires a structures and dredging permit from DEEP Office of Long Island Sound Programs under the Coastal Management Act (CGS §22a-90 et seq.). Application fees for in-water structures, whether a pound net or a new marina are based on the total area impacted (a rectangle encompassing the outer points of any netting or anchors), making application for a pound net prohibitively expensive.

New Connecticut recreational regulations passed as a declaration in March of 2013 (effective 3/30/2013) enact a daily creel limit of 50 fish or 5 gallons, whichever is greater (see Declaration 13-05). These same regulations will be in effect during 2014.

In April of 2013, Connecticut enacted a Menhaden implementation plan and passed a declaration (see declaration # 13-06) that effectively prohibits a directed fishery from occurring within the state. The declaration prohibits possessing or landing more than 6000 lbs in a single day as well as the transfer of more than 6,000 pounds of menhaden between vessels. However, the declaration does provide a mechanism for out-of-state vessels wishing to land large quantities (> 6000 lb) in Connecticut provided a quota transfer from its home state is arranged in advance. No new changes for commercial menhaden regulations are planned during 2014.

b. Summarize monitoring programs that will be performed.

The Connecticut DEEP plans to continue collecting daily harvest information through logbooks and dealer reports submitted monthly for all species. The Long Island Sound Trawl Survey will continue to record numbers, biomass and size composition of Atlantic menhaden taken in spring and fall surveys. The Connecticut River Seine Survey and Thames River Seine Survey will continue to provide indices of abundance for juvenile menhaden.

Connecticut's 2013 TAC is 64,900 or 0.02% of the coastwide quota. Menhaden bait landings from all gear types in Connecticut have been less than 50,000 since 2010. Nonetheless, Connecticut will

make an effort to collect at least one biological sample annually to fulfill requirements of Amendment 2.

c. Highlight any changes from the previous year.

See Section IV a. above and Declaration 13-05 and 13-06.

V. Atlantic Menhaden Plan specific requirements.

See Section IV c. above and see Appendix 2 - Implementation Plan for Compliance of Amendment 2 to the Interstate Fishery Management Plan for Atlantic Menhaden.

VI. Law Enforcement Reporting Requirements.

Not applicable.

Appendix 1. Connecticut fishing regulations for Menhaden

State Statute prohibiting the use of purse seines in Connecticut waters.

Sec. 26-142a. Environmental tourism cruise vessel permit. Commercial fishing vessel permits. Registration of nets and areas of use. Registration of charter boats. Fishing licenses and registrations. Possession limits. Fees.

(a)...The use of a purse seine or similar device is prohibited...

The full statute is available at: <http://www.cga.ct.gov/2011/pub/chap490.htm#Sec26-142a.htm>

(c) The fee for the following fishing licenses and registrations and for a commercial fishing vessel permit shall be :.. (14) for a license to take menhaden from marine waters for personal use, but not for sale, by the use of a single gill net not more than sixty feet in length, one hundred dollars;

Regulations pertaining to Atlantic menhaden that were in effect during 2013.

26-142a-12. Taking and sale of bait species

(b) In addition to the bait species listed in subsection (a) of this section, the following species, if legally taken under the appropriate commercial license and meeting the minimum legal length requirements specified in section 26-142a-8a of the Regulations of Connecticut State Agencies, may be offered for sale as bait under a bait dealer's license:

- (1) menhaden (*Brevoortia tyrannus*);
- (2) alewives (*Alosa pseudoharengus*);
- (3) blueback or "glut" herring (*Alosa aestivalis*);
- (4) American eel (*Anguilla rostrata*);
- (5) butterfish (*Peprilus triacanthus*);
- (6) Atlantic mackerel (*Scomber scombrus*);
- (7) whiting (*Merluccius bilinearis*);
- (8) squid (*Loligo sp.*);
- (9) Atlantic herring (*Clupea harengus*);
- (10) hickory shad (*Alosa mediocris*);
- (11) Horseshoe crabs (*Limulus polyphemus*).

26-142a-15. When a license is not required

In the marine district a commercial fishing license is not required to take, for personal use only, menhaden, hickory shad, alewives, glut herring, sea herring, eels, lampreys and bait species by the use of:

- (1) cast nets;
- (2) minnow traps not more than twenty inches long and fifteen inches in diameter;
- (3) scoop or scap nets not more than thirty-six inches in diameter;
- (4) umbrella nets not more than four feet in length by four feet in width;
- (5) seines not more than thirty feet in length; and
- (6) not more than two eel pots.

Effective April 22, 1994. Amended 12/27/2006 added hickory shad and umbrella nets.

26-142a-6. Commercial fishing gear specifications

Commercial fishing gear shall conform to the following specifications:

(c) Gill nets

- (1) In the inland district, gill nets shall have a mesh of not less than five inches when stretched except that nets used for taking white perch, catfish species and yellow perch shall have a mesh of not less than three and one half inches when stretched.
- (2) In the marine district gill nets shall have a mesh of not less than three inches when stretched with the following exceptions:
 - (A) gill nets used for taking American shad shall have a mesh of not less than five inches when stretched;
 - (B) gill nets used for taking tomcod shall have a mesh of not less than one and one-quarter inches when stretched; and
 - (C) gill nets used for taking white perch, catfish species and yellow perch shall have a mesh of not less than three and one-half inches when stretched.
- (4) All gill nets being fished under authority of a personal use gill net license issued under section 26-142a of the Connecticut General Statutes shall be personally attended by the licensee.

26-157b-1 Reports

Each holder of any commercial fishing license, landing license, pound net registration, or charter-party boat registration, each person licensed to take lobsters or fish for personal use only, and each person licensed to purchase marine species for resale shall, as provided in this section, report to the commissioner. These reports may include but are not limited to the number, weight and sex of finfish, squid, sea scallops, lobsters or crabs in the catch and landings by species and market size and grade; gear used and effort expended; area fished; port landed; disposition of catch; type and value of nets, boats and other equipment used; number of persons employed; number, weight, market size, grade and price of marine species purchased and distributed, including conch, and the number of anglers fishing on board charter-party boats. These reports shall be made on forms provided by the commissioner or by other methods approved by the commissioner. Said reports shall be completed in their entirety and submitted to the marine fisheries division office of the department (P. O. Box 719, Old Lyme, CT 06371).

- (c) Each person or firm issued a registration for a pound net or similar device shall submit a report of daily fishing activities no later than the tenth of the month following the month covered by the report.
- (d) Each person licensed to set, tend or assist in setting or tending gill nets, seines, trap nets, fish pots, fykes, scaps, scoops, weirs, eel pots or similar devices to take finfish, licensed to take finfish for commercial purposes by hook and line or licensed to take horseshoe crabs by hand, shall complete a report of all fishing activities, daily or at the end of the fishing trip. Said reports shall be submitted no later than the tenth of the month following the month covered by the report. Such reports shall be available on board any vessel at any time for inspection by authorized agents of the commissioner.
- (e) Each person licensed to set, tend, or assist in setting or tending seines, traps, scaps, scoops, weirs or similar devices to take bait species for commercial purposes shall submit a report of daily fishing activities no later than the tenth of the month following the month covered by the report.
- (f) Each person licensed to take lobsters or fish for personal use only, by means of not more than ten lobster pots, by skin diving, scuba diving or by hand, and each person licensed to take menhaden for personal use, shall submit report of daily fishing activities no later than January thirty-first of the year following the year covered by the report.

- (g) Each person (resident or nonresident) licensed to take lobsters, squid, sea scallops, crabs (other than blue crabs) or finfish for personal use or for sale by means of more than ten lobster pots or similar devices, or by the use of otter trawls, balloon trawls, beam trawls or similar devices, and each person licensed to land lobsters, sea scallops, finfish, crabs, including blue crabs, or squid shall complete a report of all fishing activities, daily or at the end of the fishing trip. Said reports shall be submitted no later than the tenth of the month following the month covered by the report. Such reports shall be available on board any vessel at any time for inspection by authorized agents of the commissioner.
- (h) Each person or firm licensed to buy lobsters, finfish, squid, crabs, or sea scallops for resale from commercial fishermen licensed by the commissioner shall complete a report of individual purchase transactions of such species, including conch, and this report shall be submitted no later than the tenth of the month following the month covered by the report.

Effective May 19, 1995, amended Subsection (d) 12/19/2000, March 31, 2003 revised reporting requirements for license fishermen and seafood dealers.

Declarations that were in place in 2013 and regulations that will be in effect during 2014:

Recreational:

Declaration of Regulation Change (13-05)

Under the authority of 26-159a of the Connecticut General Statutes and Section 26-159a-22 of the Regulations of Connecticut State Agencies, the Commissioner of Energy and Environmental Protection is authorized to establish or adjust, by declaration, closed seasons, length limits, creel limits, trip limits and trip limit adjustment values in order to comply with interstate fishery management plans adopted by the Atlantic States Marine Fisheries Commission or the U.S. Department of Commerce.

Under the authority of RCSA Sec. 26-159a-22 the sport fishing minimum length and creel (possession) limits are modified as follows:

RECREATIONAL FISHERY MEASURES FOR 2013

- (a) Unless otherwise specified in section 26-112-45 of the Regulations of Connecticut State Agencies, the daily creel limit for species taken by sport fishing methods, including spears of any kind, shall be as set forth in this subsection. No person, other than a person authorized to take finfish under a license or registration issued pursuant to section 26-142a of the Connecticut General Statutes, while on the waters of this state or on any parcel of land, structure, or portion of a roadway abutting tidal waters of this state shall possess or land any of the following species, regardless of where taken, in excess of the identified number.

(14) Menhaden (*Brevoortia tyrannus*): 50 fish or 5 gallons, whichever is greater;

Commercial:

Declaration of Regulation Change (13-06)

Under authority of Section 26-159a of the Connecticut General Statutes and Section 26-159a-22 of the Regulations of Connecticut State Agencies, the Commissioner of Energy and Environmental Protection is authorized to establish or adjust, by declaration, closed seasons, length limits, creel limits, trip limits and trip limit adjustment values in order to comply with interstate fishery management plans (FMP) adopted by the Atlantic States Marine Fisheries Commission (ASMFC) or the U.S. Department of Commerce (DOC).

In accordance with the aforementioned authority, the following sections of Departmental regulations are amended as specified on pages 2 through 7 of this Declaration.

Sec. 26-159a. Regulations concerning certain sport and commercial fishing in the marine district and possession of certain species.

(New Section) Atlantic Menhaden (*Brevoortia tyrannus*)

(a) Commercial Fishery Possession Limits.

- (1) Except as provided in subdivision (2) of this subsection, no person engaged in commercial fishing shall possess or land Atlantic menhaden in excess of 6,000 pounds. This possession limit shall apply to the aggregate of all persons on board the vessel per day or per trip whichever is the longer period of time. The transfer of more than 6,000 pounds per day of menhaden between vessels is prohibited.
- (2) Landing in excess of 6,000 pounds shall be permitted provided:
 - (A) the Commissioner receives and accepts an offer of quota transfer from another state in an amount equal to or greater than the amount of fish to be landed, and;
 - (B) such quota transfer conforms with the requirements of the Atlantic Menhaden Fishery Management Plan of the Atlantic States Marine Fisheries Commission for quota transfers between states, and;
 - (C) such quota transfer is completed before fish are offloaded in this state.

Appendix 2. Connecticut implementation plan for compliance of Amendment 2



**Connecticut Department of
Energy & Environmental Protection**
Bureau of Natural Resources
Marine Fisheries Division

State of Connecticut Implementation Plan for Compliance of Amendment 2 to the Interstate Fishery Management Plan for Atlantic Menhaden

April 15, 2013

I. Introduction

The Atlantic States Marine Fisheries Commission (ASMFC) approved Amendment 2 to the Interstate Fishery Management Plan for Atlantic Menhaden in December of 2012. The Amendment establishes a 170,800 MT total allowable catch (TAC) beginning in 2013 and specifies state-by-state allocation based on landings history of the fishery from 2009-2011. States will be required to close their fisheries when the state-specific portion of the TAC has been reached; along with overages paid back the following year. The amendment also includes provisions to allow for transfers of quota between states and a 6,000 pound bycatch provision for non-directed fisheries that are operating after a state TAC has been landed. Amendment 2 additionally establishes requirements for the reporting of bycatch landings by non-directed fisheries and introduces a requirement for biological sampling of the commercial bait harvest to support improved stock assessments. This report includes specific compliance criteria established under Amendment 2 for implementation in Connecticut on July 1, 2013.

1. Commercial Fishery Management Measures

*a) A mechanism to close directed commercial fisheries in your state once the TAC (or a percentage thereof) has been reached (**Connecticut: 0.02% of coastwide TAC or 64,900 pounds**). Every state is required to submit their official dated closure notice to the Commission at the time of closure and as part of their annual compliance reports (TAC Specification 4.2.1.1 and TAC Allocation 4.2.1.3).*

Note: The final TAC allocations were based on a coastwide TAC of 170,800 metric tons (MT) with a 1% TAC set aside for episodic events. State TACs are subject to change based on the number of states that opt into the episodic set aside.

Connecticut has no directed fishery for menhaden. The use of purse seines, the principal gear used to target menhaden on the Atlantic and Gulf coasts, is prohibited in state waters. Pound nets are also used in some regions to target menhaden, but none are currently authorized to be fished in state waters. Siting a pound net in Connecticut requires a structures and dredging permit from DEEP Office of Long Island Sound Programs under the Coastal Management Act (CGS §22a-90 et seq.). Application fees for in-water structures, whether a pound net or a new marina are based on the total area impacted (a rectangle encompassing the outer points of any netting or anchors), making application for a pound net prohibitively expensive.

Amendment 2 defines a bycatch fishery as one landing up to 6,000 pounds of menhaden per trip. Connecticut has adopted a 6,000 pound possession and landing limit by Commissioner Declaration authority signed April 8, 2013 (see PDF: Declaration 13-02 signed), effectively prohibiting a directed fishery in this state. As a consequence, no mechanism to close a directed fishery is needed.

b) A mechanism to adjust a state's TAC as required by the Atlantic States Marine Fisheries Commission.

Connecticut generally incorporates TAC's into regulations by reference to the ASMFC FMP eliminating the need to change regulations every time the quota changes. However, as the menhaden TAC only has regulatory significance for directed fisheries and our 6,000 pound possession and landing limits bar directed fisheries, we have not included reference to the TAC in regulations.

c) A mechanism to enable transfer of unused TAC between states if warranted, and the ability to adjust a state's TAC as it relates to the transfer of quota (Quota Transfers 4.2.1.4).

Regulations of Connecticut State Agencies (RCSA) §26-159a-27. Transfers of Quotas. (see Appendix 1) provides the authority and mechanism to enable transfer of unused quota between states if warranted. In addition Commissioner Declaration 13-02 (see PDF: Declaration 13-02 signed) provides a mechanism for out-of-state vessels wishing to land large quantities (>6,000 lb) in Connecticut provided a quota transfer from its home state is arranged in advance.

d) A repayment mechanism to reduce the subsequent year's quota to account for any over-harvest of the TAC on a pound for pound basis (Quota Payback 4.2.1.6).

Having barred directed fisheries through the 6,000 pound possession and landing limit it is not possible for Connecticut to exceed its TAC and be subject to pay back provisions.

e) A bycatch allowance mechanism for non-directed fisheries following the harvest of the state's TAC and closure of directed fisheries (Bycatch Allowance 4.2.1.7).

By implementing a 6,000 pound commercial possession and landing limit, Connecticut has excluded directed fishing in this state. The bycatch allowance will be in place year round.

Bycatch allowance has the following mandatory provisions:

i. 6,000 pound bycatch landing limit per calendar day for all non-directed fisheries

A 6,000 pound commercial possession or landing limit has been adopted by Declaration 13-02.

ii. Prohibit a vessel from making multiple trips in one day to land more than 6,000 lbs

Declaration 13-02 prohibits possessing or landing more than 6,000 pounds, but is silent on multiple trips per day. Given that no directed menhaden fishing gears (purse seines or pound nets) are authorized to be used in this state, and our very low recent historical landing rates (see table below) we do not believe this omission in regulatory language will undermine compliance with the conservation provisions of the FMP.

Connecticut menhaden commercial landings (pounds) per fisherman per day statistics for 2010-2012.

Year	Mean	Median	Mode	95th percentile	Largest single landing
2010	137.5	60	20	500	1,200
2011	127.7	44	20	480	2,000
2012	149.2	66	200	500	1,000

iii. Prohibit the use of multiple carrier vessels per trip to offload bycatch exceeding 6,000 pounds

Declaration 13-02 prohibits possessing or landing more than 6,000 pounds, but is silent on the use of “carrier vessels”. Given that no directed menhaden fishing gears (purse seines or pound nets) are authorized to be used in this state we do not believe this omission in regulatory language will undermine compliance with the conservation provisions of the FMP.

iv. Bycatch reporting requirements as detailed in section 2(b).

Regulations require commercial fishermen to report all commercial fishing activity including the catch and landing of all species in monthly logbooks (See RCSA sec 26-157b-1 in Appendix 1).

f) A mechanism to adjust a state’s TAC and effort controls if opting into the episodic events set aside (Episodic Events Set Aside 4.2.1.8). Logistics of the episodic events set aside are still being developed by the Board including a qualifying definition of an episodic event. Therefore, at this point, implementation plans do not need to address this set aside.

Connecticut does not intend to opt into the episodic event set aside option at this time.

g) For Virginia only, a Chesapeake Bay reduction fishery harvest cap with the following provisions. (Chesapeake Bay Reduction Fishery Harvest Cap 4.2.2.)

i. Prohibit harvest for reduction purposes within the Chesapeake Bay when 100% of 87,216 metric tons (mt) is harvested from the Chesapeake Bay.

ii. A repayment mechanism to reduce the subsequent year’s harvest cap to account for any over-harvest of the cap on a pound for pound basis.

iii. A rollover mechanism to increase the subsequent year’s harvest cap to account for unlanded fish to a maximum of 10,976 mt. The rollover applies to the following year only, and will not be carried for multiple years.

Note–All harvest within the Chesapeake Bay will count against the state’s overall TAC

Not applicable.

2. Monitoring Requirements

a) A catch reporting system to enable weekly monitoring of a state’s TAC, unless a state can demonstrate the effectiveness of an alternate reporting time schedule as approved by the Board (Quota Monitoring 3.6.1.2).

A state’s catch reporting plan must include the following information.

i. Indicate whether harvesters, dealers, or both are required to submit reports. The PRT recommends harvester reporting to account for Atlantic menhaden retained for personal use.

Atlantic menhaden landings will be monitored via Commercial Fisheries Catch Logs and NMFS Fishing Vessel Trip Reports (VTR) on a monthly basis. These reports contain daily records of fishing activity including gear type and area fished (See RCSA §26-157b-1 in Appendix 1). Marine Fisheries staff enter Catch Logs into the Standard Atlantic Fisheries Information System (SAFIS) as reports are received. VTR data is downloaded as needed.

Having no directed fisheries for menhaden we have eliminated the need for weekly monitoring commonly used to effectively manage such fisheries.

ii. Specify the amount of detail reported (e.g., trip level or summary). Define the data elements that are required to be collected (by license type or gear type where applicable). The Amendment recommends trip level reporting with the minimum data reporting elements as required by the Atlantic Coastal Cooperative Statistics Program. (1) trip start date (2) vessel identifier (3) individual fisherman identifier (4) dealer identification (5) trip number (6) species (7) quantity (8) units of measurement (9) disposition (10) county or port landed (11) gear (12) quantity of gear (13) number of sets (14) fishing time (15) days/hours at sea (16) number of crew (17) area fished.

Connecticut requires all commercial fishermen to submit monthly Catch Logs of daily trip level fishing activity (see RCSA §26-157b-1 in Appendix 1). Connecticut has adopted all of the minimum data elements required by ACCSP and staff enter that data into the ACCSP eTrips application as they are received.

iii. The plan must require purse seine and bait seine vessels (or snapper rigs) submit trip level reports (e.g., Captain Daily Fishing Reports).

Purse seining is prohibited in state waters, while possession or landing is limited to 6,000 pounds by Declaration 13-02, effectively eliminating these fisheries (purse seine or “snapper rigs” from landing in this state even if fishing were taking place outside our state waters.

iv. Specify the frequency and mechanism of submitting reports. The Amendment recommends weekly reporting.

See section a) *i* above

b) A mechanism to require timely reporting of bycatch allowance landings by non-directed fisheries through the reporting system approved by the Board in section 2(a).

Note—All bycatch from non-directed fisheries during a closed season must be reported separately from directed harvest in annual compliance reports. Bycatch during the open season will count towards a state’s TAC.

Connecticut requires all harvest of bycatch to be reported in the same manner as stated in section a) *i* above (RCSA sec 26-157b-1). Should total landings exceed the TAC under the 6,000 pound limit, those excess landings will be reported separately in annual compliance reports.

c) A mandatory biological sampling program to collect age and length data from the commercial bait harvest to support improved stock assessments (Biological Data 3.6.2.1).

i. One 10-fish sample (age and length) per 300 metric tons landed for bait purposes for ME, NH, MA, RI, CT, NY, NJ, DE.

Note–The Amendment recommends collecting the samples by gear type and defines each 10 fish sample as an independent sampling event; therefore, multiple 10-fish samples should not be collected from the same landing event.

Connecticut’s 2013 TAC is 64,900 or 0.02% of the coastwide quota. Menhaden bait landings from all gear types in Connecticut have been less than 50,000 since 2010. Nonetheless, Connecticut will make an effort to collect at least one biological sample annually.

ii. One 10-fish sample (age and length) per 200 metric tons landed for bait purposes for MD, PRFC, VA and NC

Not applicable.

d) A mandatory monitoring/sampling program that requires all states with a pound net fishery collect catch and effort data elements (Adult CPUE Index 3.6.2.2). Mandatory reported data elements are,

i. total pounds (lbs) landed per day

ii. number of pound nets fished per day

Note–In order to characterize selectivity of this gear in each state, a goal of collecting five 10-fish samples from pound net landings annually is recommended.

Not applicable.

3. De minimis

a) State(s) with a reduction fishery are not eligible for de minimis consideration. To be eligible for de minimis status, a state’s bait landings must be less than 1% of the total coastwide bait landings for the most recent two years (Criteria for De Minimis Consideration 4.5.3.1).

Note–Based on 2010-2011 bait landings data, ME, NH, RI, CT, NY, DE, SC, GA, and FL are eligible for de minimis status in 2013).

Connecticut is not considering *de minimis* status for 2013.

b) If granted de minimis status by the Board, states are exempt from implementation of 2(c) and 2(d), but must still submit a plan to implement all other compliance criteria as detailed in this memo. The Board also approved a de minimis exemption for NH, SC and GA from implementation of timely reporting, but those states are still required to describe their current reporting structure following the guidance in section 2(a). (Plan Requirements if De Minimis Status is Granted 4.5.3.2)

Not applicable.

APPENDIX 3.

26-157B - REPORTS TO THE COMMISSIONER

26-157B - REPORTS TO THE COMMISSIONER 18

26-157b-1 Reports 18

26-157b-1 Reports

Each holder of any commercial fishing license, landing license, pound net registration, or charter-party boat registration, each person licensed to take lobsters or fish for personal use only, and each person licensed to purchase marine species for resale shall, as provided in this section, report to the commissioner. These reports may include but are not limited to the number, weight and sex of finfish, squid, sea scallops, lobsters or crabs in the catch and landings by species and market size and grade; gear used and effort expended; area fished; port landed; disposition of catch; type and value of nets, boats and other equipment used; number of persons employed; number, weight, market size, grade and price of marine species purchased and distributed, including conch, and the number of anglers fishing on board charter-party boats. These reports shall be made on forms provided by the commissioner or by other methods approved by the Commissioner. Said reports shall be completed in their entirety and submitted to the Marine Fisheries Division office of the department (P. O. Box 719, Old Lyme, CT 06371).

- (a) Each licensed commercial shad fisherman shall submit a report of daily fishing activities no later than June 30 of the year covered by the report.
- (b) Each person licensed to take blue crabs for commercial purposes shall submit a report of daily fishing activities no later than the tenth of the month following the month covered by the report.
- (c) Each person or firm issued a registration for a pound net or similar device shall submit a report of daily fishing activities no later than the tenth of the month following the month covered by the report.
- (d) Each person licensed to set, tend or assist in setting or tending gill nets, seines, trap nets, fish pots, fykes, scaps, scoops, weirs, eel pots or similar devices to take finfish, or licensed to take finfish for commercial purposes by hook and line or licensed to take horseshoe crabs by hand, shall complete a report of all fishing activities, daily or at the end of the fishing trip. Said reports shall be submitted no later than the tenth of the month following the month covered by the report. Such reports shall be available on board any vessel at any time for inspection by authorized agents of the commissioner.
- (e) Each person licensed to set, tend, or assist in setting or tending seines, traps, scaps, scoops, weirs or similar devices to take bait species for commercial purposes shall submit a report of daily fishing activities no later than the tenth of the month following the month covered by the report.
- (f) Each person licensed to take lobsters or fish for personal use only, by means of not more than ten lobster pots, by skin diving, scuba diving or by hand, and each person licensed to take menhaden for personal use, shall submit a report of daily fishing activities no later than January thirty-first of the year following the year covered by the report.
- (g) Each person (resident or nonresident) licensed to take lobsters, squid, sea scallops, crabs (other than blue crabs) or finfish for personal use or for sale by means of more than ten lobster pots or similar devices, or by the use of otter trawls, balloon trawls, beam trawls or similar devices, and each person licensed to land lobsters, sea scallops, finfish, crabs, including blue crabs, or squid shall complete a report of all fishing activities, daily or at the end of the fishing trip. Said reports shall be submitted no later than the tenth of the month following the month covered by the report. Such reports shall be available on board any vessel at any time for inspection by authorized agents of the commissioner.
- (h) Each person or firm licensed to buy lobsters, finfish, squid, crabs, or sea scallops for resale from commercial fishermen licensed by the commissioner shall complete a report of individual purchase transactions of such species, including conch, and this report shall be submitted no later

than the tenth of the month following the month covered by the report.

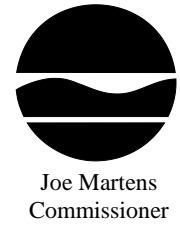
- (i) Each person or firm issued a charter boat or party boat registration shall submit a report of daily fishing activities no later than the tenth of the month following the month covered by the report.
- (j) In addition to the provisions of subsections (a) through (i), inclusive, of this section for all species managed by quota, all holders of licenses or registrations issued under section 26-142a of the Connecticut General Statutes concerning the purchase for resale of finfish, lobsters, crabs, sea scallops or squid, or the taking of said resources, shall report weekly total landings in pounds and Connecticut port where landed. Weekly reports shall be submitted for the period commencing on Sunday and concluding on the following Saturday, and shall be submitted by a method approved by the commissioner no later than 4:30pm on the following Tuesday or 24 hours after the end of any fishing trip commencing prior to a Saturday and concluding after the following Monday.

26-159a-27. Transfers of quotas

Upon the request of a member state of the Atlantic States Marine Fisheries Commission and subject to a determination by the Commissioner that Connecticut will not be able to utilize its commercial quota for a quota-managed species before the end of the state-specific quota period, the Commissioner may transfer a portion of the Connecticut quota to the state making the request.

**New York State Department of Environmental Conservation
Fish, Wildlife & Marine Resources**

Bureau of Marine Resources
205 North Belle Mead Rd, East Setauket, NY 11733
Phone: (631) 444-0430 • **Fax:** (631) 444-0434
Website: www.dec.ny.gov



April 17, 2014

New York 2013 Atlantic Menhaden Compliance Report

Introduction:

Historically, New York supported a large and active Atlantic menhaden processing fishery. The importance of this fishery diminished during the early to mid 1900s. The last processing plant ceased operations in 1969. Legislation passed in 1998 reduced the area in which purse seine vessels can operate, which lowered participation in this fishery. Today, menhaden are harvested on a small scale in New York, generally for bait.

The menhaden bait fishery includes Marine Bait, Lobster Bait Gillnet, Food Fish Resident and Non Resident, Food Fish Landing, and Menhaden Purse Seine permits. All of these licenses require mandatory reporting of landings through State fishing vessel trip reports (SVTRs) or the Atlantic Coastal Cooperative Statistic’s (ACCSP) Etrips reporting system. The Food Fish Landing license and Menhaden Purse Seine licenses started requiring mandatory reporting in 2011 and 2013 respectively. The Lobster Bait Gillnet permit switched from a yearly recall survey to SVTRs in 2012.

Previous landings data reported to ASMFC only included Lobster Bait Gillnet permit landings and NMFS landings data. Although mandatory reporting through SVTRs was in place for most permits during 2009 – 2011, data entry and compliance monitoring was not performed during these years due to staff and funding constraints. Data entry began in 2012 and had a compliance rate of 27% for all permit holders. NY implemented a rigorous compliance program in 2013 and currently compliance is at 78% for all permit holders. This is a 52% increase in compliance from 2012 to 2013. Data entry for 2009 – 2011 is still ongoing, however data from 2013 is the most accurate and complete dataset for Atlantic Menhaden landings in NY. All current commercial landings estimates are summarized in this report. Data displayed in red is confidential.

I. Request for *de minimus* status:

- a. New York is currently requesting *de minimus* status. Although NY is still in the process of rebuilding its historical landings data for the Amendment 2 reference period, landings data from 2013 indicate that harvest from directed gears is less than 1% of the coast wide bait landings. As stated above, the data from 2013 is the most complete and accurate landings data available. A breakdown of NY landings by gear for 2013 is provided below. [Removed because of data confidentiality]

II. Previous calendar year’s fishery and management program:

Directed Fishery

- a.

TABLE 2. NY MENHADEN BAIT LANDINGS BY YEAR AND SOURCE

DATA SOURCE	*2008	*2009	*2010	*2011	2012	2013
LOBSTER BAIT GILL NET SURVEY	247,200	189,480	161,900	127,230	NA	NA

FEDERAL VTR		30,103	30,170	45,113	55,697	54,496
STATE VTR/ ETRIPS/DEALER	128,179	85,352	168,330	106,669	166,738	1,123,497
TOTAL	375,379	304,935	360,400	279,012	222,435	1,177,993

*Landings are still preliminary and data entry is incomplete for 2008 – 2011

- b. New York did not close its Atlantic Menhaden fishery during 2013.
- c. The Commonwealth of Massachusetts transferred 500,000 lbs of Atlantic Menhaden commercial quota to the state of New York for the 2013 fishing year. This quota transfer was approved on 11/18/2013 (Appendix A).

Bycatch Fishery

- a. New York did not close its commercial Atlantic Menhaden fishery during 2013. Therefore all bycatch landings were included in the Directed Fishery analysis. The following tables summarize the landings for bycatch gears in NY waters. [Removed because of data confidentiality]

III. Mandatory Monitoring Programs:

- a. The Atlantic Menhaden bait fishery includes the Marine Bait, Lobster Bait Gillnet, Food Fish Resident and Non Resident, Food Fish Landing, and Menhaden Purse Seine licenses. Landings are reported through the New York State Fishing Vessel Trip Report (SVTR) and Dealer Report programs. The SVTR program collects trip level fishing activity and is submitted to the department monthly. The Dealer Report program also collects trip level information, but is submitted weekly.

The following information is collected from SVTRs:

Vessel Name	Average Depth
State Reg or Vessel Doc #	Species Fished
Permit Type and Number	# of each Species Kept or Discarded
Date/Time Sailed	Dealer Permit # or Sales Disposition
# of Crew	Dealer Name
# of Anglers	Date Sold
Gear Fished	Port and State Landed
Mesh/Ring Size	Date/Time Landed
Quantity of Gear	
Size of Gear	
# of Hauls	
Average Tow/Soak Time	
NMFS Statistical Area Fished	
LAT/LONG or Loran of Area Fished	

The following information is collected from Dealer Reports:

Dealer Name, Address and Phone Number	Fishermen SVTR #
Dealer Permit Number	Species and Grade
Number of Purchases	Pounds
Purchase Date	Price per lb
Fishermen Name and Permit	Dollars

Vessel
Vessel Fed Permit #
State Reg Number
Gear

- b. Menhaden Purse Seine licenses follow the reporting requirements outlined in section a.
- c. Age and Length data is collected through a contract with Cornell Cooperative Extension. During 2013 there were 150 length samples and 75 scales collected from the pound net fishery. These samples were collected from a single fisherman during two separate sampling events and the data collected is summarized below.

TABLE 5. NY 2013 ATLANTIC MENHADEN COMMERCIAL POUND NET LENGTH FREQUENCIES

LENGTH BIN (cm)	FREQUENCY
25 - 29	112
30 - 34	38
AVERAGE LENGTH	28.6

- d. Pound nets can be used to harvest Atlantic Menhaden in New York under the Food Fish Resident, Food Fish Non-Resident, and Food Fish landing licenses. These licenses follow the reporting requirements outlined in section a.

IV. Planned management programs for the current calendar year

- a. There are no current changes planned for the current year.
- b. New York's fishery independent data was considered in the Data Workshop for Atlantic Menhaden and therefore is not included here. There are no significant changes planned for NY's monitoring programs.

NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF FISH AND WILDLIFE
MARINE FISHERIES ADMINISTRATION

**NEW JERSEY ATLANTIC MENHADEN FISHERIES
2013 MANAGEMENT MEASURES, HARVEST,
AND RESOURCE MONITORING**

**NEW JERSEY ATLANTIC MENHADEN
MANAGEMENT PROGRAM, 2014**

Submitted to
Atlantic States Marine Fisheries Commission
as a requirement of
Amendment 1 to the Atlantic Menhaden Fisheries Management Plan

Jeffrey Brust
April 4, 2014

I. SUMMARY OF ATLANTIC MENHADEN FISHERY AND RESOURCE MONITORING IN NEW JERSEY

The taking of Atlantic menhaden by any means for purpose of fishmeal reduction was prohibited in New Jersey marine waters throughout 2013 by legislation implemented January 6, 2002. This law, however, continued to allow for the licensed taking of Atlantic menhaden in New Jersey marine waters for use as bait for commercial and recreational purposes. The New Jersey Atlantic menhaden bait fishery was successfully sampled by the NJ Bureau of Marine Fisheries (Bureau) in 2013. Personnel were able to collect 590 Atlantic menhaden biological samples from three different fishing ports from the commercial bait fishery throughout the 2013 fishing season. These samples were sent to the National Marine Fisheries Service (NMFS) for processing and ageing. The Bureau also continued the Delaware River Young-of-Year Survey used to develop the 2013 estimate of juvenile Atlantic menhaden abundance in the mid-Atlantic region. The most recent year's (2012) index of juvenile abundance is the second lowest value in the time series.

II. REQUEST FOR *DE MINIMUS* STATUS

New Jersey does not request *de minimus* status under Amendment 1 to the Interstate Fishery Management Plan for Atlantic Menhaden.

III. NEW JERSEY ATLANTIC MENHADEN FISHERY AND MANAGEMENT PROGRAM 2013

A. Fishery Dependent Monitoring

Bureau personnel were able to collect 590 Atlantic menhaden biological samples (individual length and weight measurements and scales) from the commercial purse seine, pound net, and gill net fisheries in 2013. Samples of 10 fish each were collected from May 9 through November 26, 2013 from three ports throughout the state (Cape May, Point Pleasant and Sandy Hook). Scales and corresponding length and weight measurements, as well as the vessel name and fishing location, were sent to the NMFS Population Dynamics Team, NOAA Fisheries, Beaufort, NC for processing and ageing. New Jersey menhaden bait landings were comprised of age 2 through 5 year old menhaden. Approximately 95% of the purse seine catch was comprised of ages 2-4, while ages 3 and 4 accounted for 95% of the gill net harvest (Figure 1).

B. Fishery Independent Monitoring

1. Delaware River Young-of-Year Survey

Since 1980, Bureau personnel have conducted a striped bass young-of-year seine survey in the Delaware River. This survey catches a variety of other species of fish and invertebrates, including significant numbers of Atlantic menhaden. The survey area extends from river mile 53.5 to 126 (Salem Nuclear Plant to Trenton), and is divided into three regions based on salinity. Stations are sampled twice per month using a 100-foot bagged seine with 0.25" mesh. Survey

methodology has changed considerable since the survey began in 1980. Modifications include changes to station selection, distribution of stations among regions, single/replicate tows, and months sampled. Standardized methodology employed since 1998 includes sampling 32 fixed stations twice per month from June to November. Data collected for menhaden includes number per tow and up to 30 lengths per tow. Prior to 2001, length data consisted of only minimum and maximum length per tow. Other information collected includes tide, water temperature, salinity, and dissolved oxygen.

In prior years, the menhaden index was calculated based on all tows conducted in the lower two regions. Stations furthest up river, in the tidal fresh portion of the survey area, were excluded from the index calculation because very few (less than 0.1%) of the menhaden caught were from this region. However, significant changes in sampling methodology over the time series suggest that the data should be further subset to exclude observations collected using methods that were “substantially” different from current methods. For example, station selection was relatively haphazard for the years 1980-1985, so these years were removed. Also, replicate tows were conducted at each station for a number of years. For these years, only the first set at each station was included. Finally, after many changes to station selection, a fixed set of stations was developed in 1998 and have been used consistently since. Although not all of these stations have been sampled over the entire survey time period, only data from these stations were used in the analysis.

Not all menhaden collected in the seine survey are considered young of year fish. The Atlantic Menhaden Technical Committee generally considers fish less than 150 mm in August through November to be Age 0. The annual geometric mean number of fish per tow was multiplied by the annual ratio of young of year fish (N_{yoy} / N_{tot}) to develop the young of year index for years 2001 to 2012. For years prior to 2001, the overall young of year ratio (all years combined) was applied to the geometric mean to estimate young of year abundance.

Data from the 2013 Delaware River Seine Survey have not been finalized, but will be available shortly upon request. For the 2012 survey, a total of 181 menhaden were captured during 92 tows conducted between August and September (appropriate stations and regions as described above). The geometric mean catch per tow of Age 0 menhaden was 0.40 (Figure 2), which is the second lowest value of the time series and significantly below the long-term mean of 2.88.

2. New Jersey Ocean Trawl Survey

New Jersey has conducted a seasonal trawl survey of nearshore ocean waters since 1988. Since 1990, five cruises occur each year during January/February, April, June, August, and October. Menhaden are occasionally captured during the survey, and attempts were made to develop a fishery independent index of abundance for age 1+ menhaden. Unfortunately, the incidence of menhaden in the survey were too sporadic to develop an index. Staff may investigate this issue again if the incidence of menhaden in the survey becomes more regular.

C. New Jersey Regulations on Atlantic Menhaden in 2013

As in previous years, New Jersey regulations at New Jersey Administrative Code (N.J.A.C) 7:25-22.3 through 7:25-22.4 (Attachment 1) governed the taking of Atlantic menhaden by purse seine for bait. The taking of Atlantic menhaden commercially for bait by other gear types, such as pound net, gill net, trawl, etc. was governed by regulations specific to those gear types pertaining to licensing, seasons, and gear restrictions. The taking of Atlantic menhaden recreationally for personal bait was governed by gear restrictions for seine, cast net, dip net, and lift or umbrella net.

In December 2012, the Atlantic States Marine Fisheries Commission (Commission) Atlantic Menhaden Management Board (Board) approved Amendment 2 to the Atlantic Menhaden Fishery Management Plan (FMP), with a pending implementation date of July 1, 2013. As New Jersey's regulatory process typically takes over a year, compliance with Amendment 2 of the FMP for all gears was achieved through statutory measures, which supersedes the Administrative Code. New Jersey Statutes Annotated (N.J.S.A.) 7:23:3-51 *et seq.* implements a limited entry fishery based on harvest history. Qualifying participants must purchase a Menhaden Landing License, which would allow them unlimited daily harvest and sales of menhaden. In order to track harvest, all Landing License holders must submit trip level reports on a monthly basis, while any individual or entity that sells menhaden must purchase a Menhaden Dealers License and submit weekly reports of all transactions. Dealer reports will be used to track New Jersey's quota under Amendment 2, which is currently allocated as 95% to purse seine gear and 5% to all other gear.

At the time of this writing, additional legislation is under review to allow a "personal use with limited sale" license category. This legislation would allow pot (crab, lobster, conch) fishermen to harvest unlimited quantities of menhaden for use as bait in their own pots, but only allow sale of up to 500 pounds per day. This license would also have mandatory reporting requirements. Harvesters who do not possess the "unlimited" landing license or the expected "limited sale" license are restricted to 100 pounds of menhaden landed per day.

Development of statutory management measures was necessary in order to meet the Amendment 2 implementation timeline. However, statutory measures are more difficult and time consuming to modify (*e.g.* quota allocation) in the future. It is intended that the New Jersey Marine Fisheries Administration will eventually implement regulations consistent with Amendment 2 requirements that will be easier to modify in a timely manner, but the time frame for these regulations is unknown.

D. New Jersey Atlantic Menhaden Harvest in 2013

Several sources of data were used to develop New Jersey menhaden bait landings estimates. As in previous years, purse seine harvesters are required to submit trip level harvest reports to the State on a monthly basis. Many of these landings are also reported by dealers through the SAFIS system. In addition, beginning July 1, 2013, New Jersey implemented mandatory harvester reporting requirements for all gears, as well as for menhaden dealers. Data from all of these sources were compiled and cross checked to develop harvest estimates for New Jersey in 2013.

Atlantic menhaden bait landings in New Jersey for 2013 totaled 39,819,342 pounds (18,067 MT), which is less than half of New Jersey's reported landings for 2012 (Figure 3). The purse seine fishery is estimated to have harvested approximately 98% of its quota

Landings decreased for all gears due to implementation of a quota through Amendment 2 of the FMP. Overall landings were down 54% relative to 2012. Purse seine landings accounted for more than 95% of total harvest. Confidentiality concerns at the harvester and dealer level prohibit providing additional information in this report, but details are available from staff on request.

The harvest of Atlantic menhaden taken recreationally for bait is not reported. The Division of Fish & Wildlife presently estimates that the level of this recreational harvest for bait is relatively small when compared to the commercial harvest.

There is no current estimate of non-harvest losses of Atlantic menhaden in New Jersey.

E. Amendment 1 Habitat Recommendations

No mandatory measures related to habitat or habitat protection is implemented through this amendment.

IV. NEW JERSEY ATLANTIC MENHADEN FISHERY AND MANAGEMENT PROGRAM FOR 2014

A. New Jersey Statute and Regulations for Atlantic Menhaden in 2014

The New Jersey Legislature passed legislation in 2013 to maintain compliance with Amendment 2 of the FMP. These regulations will remain in place for 2014. In addition, draft legislation to allow personal use harvest of menhaden is expected to be passed in early 2014; these regulations will also maintain compliance with Amendment 2. Finally, legislation implemented January 6, 2002 prohibiting the harvest of menhaden for reduction in New Jersey marine waters remain in effect.

B. Atlantic Menhaden Monitoring Program for 2014

With the continued cooperation of the Atlantic menhaden commercial bait fishery, from all major ports, Bureau personnel again plan to obtain the target sample size of 350 samples obtained throughout the bait fishing season. Whole fish will be collected and then measured. The size data (individual lengths and weights) and scale samples will be provided to the NMFS – Beaufort Laboratory for ageing.

Bureau personnel will also continue the Delaware River Young-of-Year Survey. All Atlantic menhaden will be counted and a sub-sample of length measurements will be collected after each seine haul. An age-0 geometric mean index will be calculated to continue the timeseries of menhaden recruitment in the Delaware Estuary for future use in the coastwide recruitment index.

C. Significant Changes in Management and/or Monitoring of Atlantic Menhaden in 2014

The New Jersey Legislature passed legislation in 2013 to maintain compliance with Amendment 2 of the FMP. These regulations will remain in place for 2014. In addition, draft legislation to allow personal use harvest of menhaden is expected to be passed in early 2014; these regulations will also maintain compliance with Amendment 2.

V. PLAN SPECIFIC REQUIREMENTS

N. J. A. C. 7:25-22.3a(1) specifies the reporting requirement that “All persons licensed to take Atlantic menhaden for bait purposes only shall keep, on forms supplied by the Division’s Bureau of Marine Fisheries, accurate records of the amount and location of Atlantic menhaden harvested.” This New Jersey regulatory requirement for the purse seine bait fishery satisfies the reporting requirement of Amendment 1 stated in Section 5. Compliance, *5.1.1.2 Monitoring Requirements (fishery-dependent measures)*, “States should maintain at least their current reporting and data collection programs and are encouraged to adopt the recommendations forwarded from the ACCSP. States are encouraged to assist the NMFS in the collection of biological data from their respective menhaden fisheries. In particular, states that have significant menhaden bait fisheries should work closely with NMFS personnel to ensure adequate sampling of those fisheries.” See MENHADEN BAIT REPORT and FISHING ZONES forms (Attachments 2 and 3).

VI. LAW ENFORCEMENT REPORTING REQUIREMENTS

There are no plan specific law enforcement requirements in Amendment 1. However, New Jersey regulations at N. J. A. C. 7:25-22.3 (b) 13 state “Any vessel operating under a permit for the purpose of taking Atlantic menhaden for bait purposes shall be required to notify the Department of the intended fishing location of the vessel. The notification shall be made by calling the Division’s Marine Enforcement Unit, Bureau of Law Enforcement at (609) 748-2050, prior to fishing in State waters and prior to change of location.” The Bureau of Law Enforcement maintains these daily call-in records.

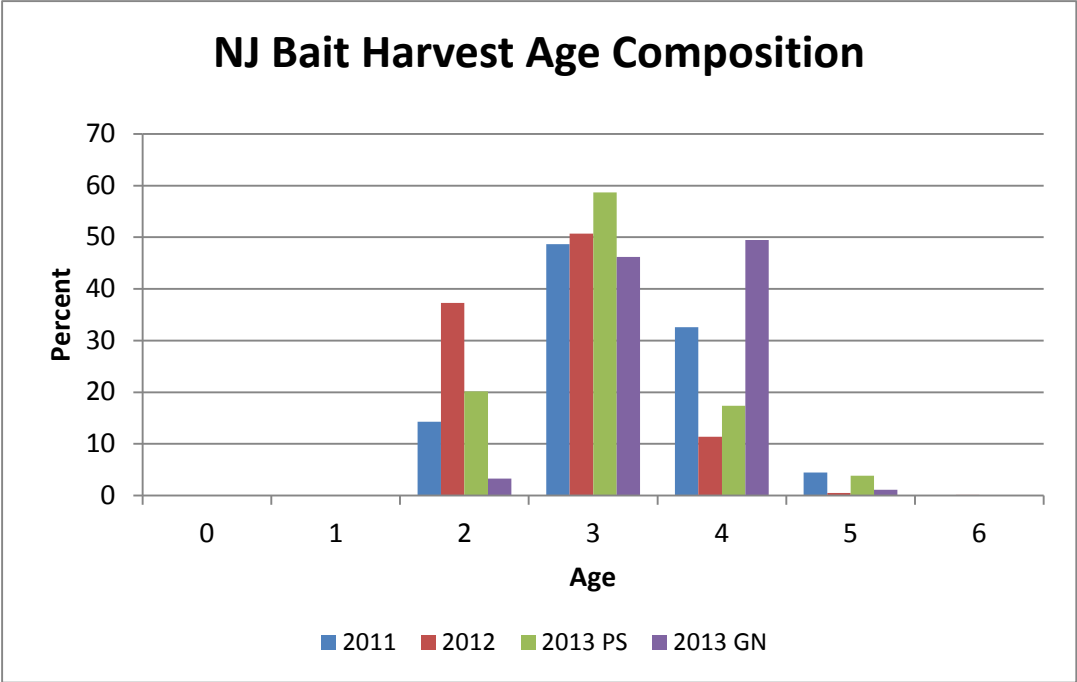


Figure 1. Age composition of New Jersey’s commercial menhaden bait landings.

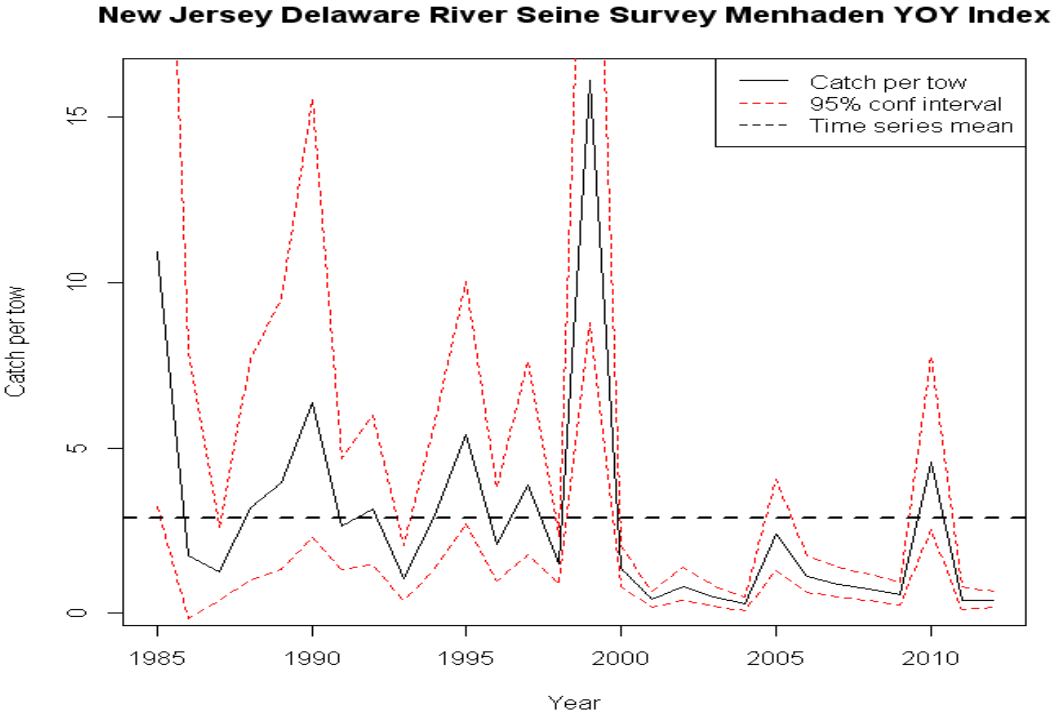


Figure 2. Geometric mean index of YOY menhaden from New Jersey’s Delaware River Seine Survey.

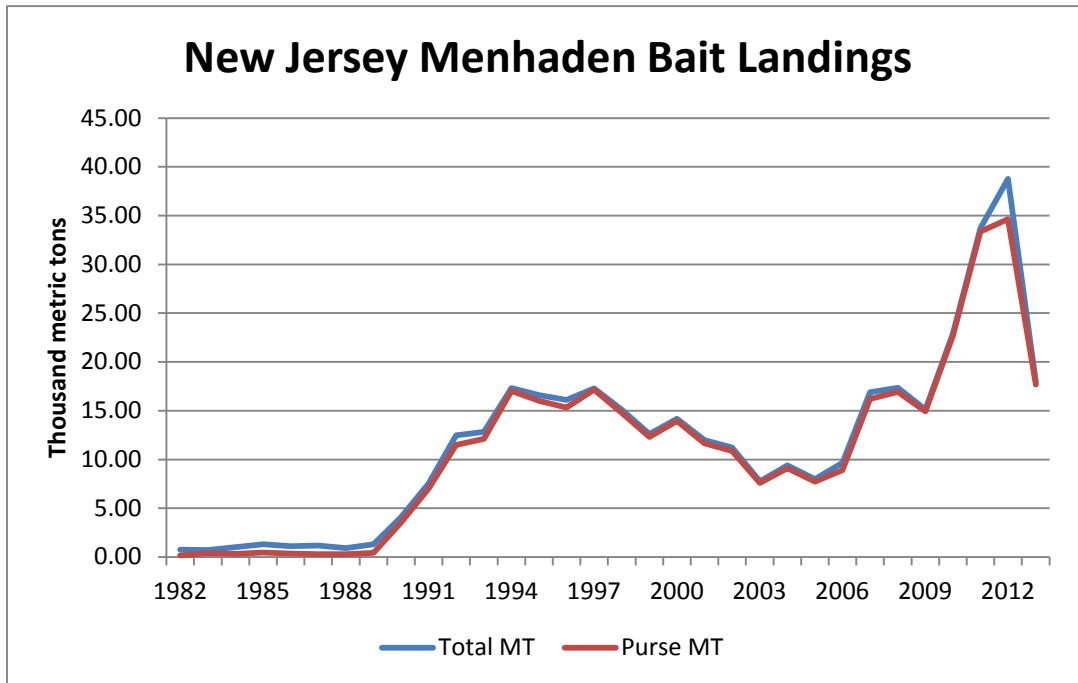


Figure 3. Atlantic menhaden commercial bait landings (thousand mt) for all gears combined and the purse seine fishery only in New Jersey.

7:25-22.1 Taking of Atlantic menhaden for fish meal reduction

The taking of Atlantic menhaden (*Brevoortia tyrannus*) from the marine waters of the State of New Jersey by any means for fish meal reduction is prohibited. This prohibition does not apply to the taking of menhaden for bait which is regulated under N.J.A.C. 7:25-22.3.

Amended by R.1989 d.394, effective July 17, 1989.
See: 21 N.J.R. 107(a), 21 N.J.R. 2035(a).

Reference to Atlantic menhaden specifically and latin name (*Brevoortia tyrannus*) added for clarity.

Amended by R.2005 d.413, effective November 21, 2005.

See: 37 N.J.R. 742(a), 37 N.J.R. 4408(a).

Section was "Menhaden season"; rewrote the section.

Case Notes

Commercial fishing organization had no rights, under the privileges and immunities clause of the Constitution, which could be violated as a result of state regulations prohibiting fishing. *Ampro Fisheries, Inc. v. Yaskin*, 247 N.J.Super. 111, 588 A.2d 879 (A.D.1991), certification granted 126 N.J. 340, 598 A.2d 896, affirmed in part, reversed in part 127 N.J. 602, 606 A.2d 1099, certiorari denied 113 S.Ct. 409, 506 U.S. 954, 121 L.Ed.2d 333.

State regulation prohibiting fishing was within the scope of statute permitting regulation of fish and game. *Ampro Fisheries, Inc. v. Yaskin*, 247 N.J.Super. 111, 588 A.2d 879 (A.D.1991), certification granted 126 N.J. 340, 598 A.2d 896, affirmed in part, reversed in part 127 N.J. 602, 606 A.2d 1099, certiorari denied 113 S.Ct. 409, 506 U.S. 954, 121 L.Ed.2d 333.

State regulation prohibiting fishing did not constitute impermissible disparate treatment. *Ampro Fisheries, Inc. v. Yaskin*, 247 N.J.Super. 111, 588 A.2d 879 (A.D.1991), certification granted 126 N.J. 340, 598 A.2d 896, affirmed in part, reversed in part 127 N.J. 602, 606 A.2d 1099, certiorari denied 113 S.Ct. 409, 506 U.S. 954, 121 L.Ed.2d 333.

State regulation prohibiting fishing did not constitute impermissible use of "police power". *Ampro Fisheries, Inc. v. Yaskin*, 247 N.J.Super. 111, 588 A.2d 879 (A.D.1991), certification granted 126 N.J. 340, 598 A.2d 896, affirmed in part, reversed in part 127 N.J. 602, 606 A.2d 1099, certiorari denied 113 S.Ct. 409, 506 U.S. 954, 121 L.Ed.2d 333.

State regulation prohibiting fishing did not violate commercial fishing organization's rights under the commerce clause. *Ampro Fisheries, Inc. v. Yaskin*, 247 N.J.Super. 111, 588 A.2d 879 (A.D.1991), certification granted 126 N.J. 340, 598 A.2d 896, affirmed in part, reversed in part 127 N.J. 602, 606 A.2d 1099, certiorari denied 113 S.Ct. 409, 506 U.S. 954, 121 L.Ed.2d 333.

State regulation prohibiting fishing was valid under supremacy clause. *Ampro Fisheries, Inc. v. Yaskin*, 247 N.J.Super. 111, 588 A.2d 879 (A.D.1991), certification granted 126 N.J. 340, 598 A.2d 896, affirmed in part, reversed in part 127 N.J. 602, 606 A.2d 1099, certiorari denied 113 S.Ct. 409, 506 U.S. 954, 121 L.Ed.2d 333.

State regulation purporting to regulate fishing within Delaware Bay was severable from other regulations. *Ampro Fisheries, Inc. v. Yaskin*, 247 N.J.Super. 111, 588 A.2d 879 (A.D.1991), certification granted 126 N.J. 340, 598 A.2d 896, affirmed in part, reversed in part 127 N.J. 602, 606 A.2d 1099, certiorari denied 113 S.Ct. 409, 506 U.S. 954, 121 L.Ed.2d 333.

7:25-22.2 (Reserved)

Repealed by R.2005 d.413, effective November 21, 2005.

See: 37 N.J.R. 742(a), 37 N.J.R. 4408(a).

Section was "Purse seine fishing of Atlantic menhaden."

7:25-22.3 Taking of Atlantic menhaden for bait

(a) Persons licensed to fish for or in any way participate in the fishery for Atlantic menhaden (*Brevoortia tyrannus*) with a purse seine or shirred net in the marine waters of New Jersey pursuant to N.J.S.A. 23:3-51 and N.J.S.A. 23:3-52, may apply between January 1 and March 1 for a permit for the purpose of taking Atlantic menhaden for bait purposes only.

1. All persons licensed to take Atlantic menhaden for bait purposes only shall keep, on forms furnished by the Division's Bureau of Marine Fisheries, accurate records of the amount and location of Atlantic menhaden harvested. Forms are available from the Trenton Office of the Division, Bureau of Marine Fisheries, 501 East State Street, Third Floor, Trenton, New Jersey 08625. These records shall be filed by the 10th day of each month with the Division's Trenton office. If no Atlantic menhaden were harvested during the month, a report to that effect shall be provided to the Division's Bureau of Marine Fisheries.

(b) Persons licensed to fish for Atlantic menhaden with a purse or shirred net in the marine waters of New Jersey, for the purpose of taking Atlantic menhaden for bait purposes only, shall be subject to the following:

1. Fishing, for the purpose of this section, shall be defined as having a purse seine in the marine waters of this State.

2. Fishing shall be restricted to not closer than 0.6 nautical miles of any point along the shore, jetties or fishing piers in the Atlantic Ocean, in the portion of the Delaware Bay south and east of LORAN C line 42850, and in Raritan Bay and Sandy Hook Bay. It will be incumbent upon the captain of a purse seine vessel to determine the possibility of drifting inside the limit while fishing, before setting his or her net. Drifting into the restricted area along the shore or around the jetty or pier while fishing shall be considered a violation of this subchapter.

i. Any vessel operating under a permit for the purpose of taking Atlantic menhaden for bait purposes outside the legal area of fishing as specified in (b)2 above shall be subject to the following penalties:

- (1) A one month permit suspension shall be imposed on the permittee for a first offense.
 - (2) A two month permit suspension shall be imposed on the permittee for a second offense.
 - (3) A six month permit suspension shall be imposed on the permittee for a third offense.
- ii. A permit suspension applicable to both the vessel and the owner must occur within the normal season of fishing operations which extends from May 15 to October 31 each year.
 - iii. If the duration of a permit suspension is not completed during the current year's normal season of fishing operations, the balance of the permit suspension shall be made up during the following year's normal season of fishing operations.
 - iv. A permit holder incurring a permit suspension who does not incur a second permit suspension for a three year period following the initial violation shall have the first permit suspension removed from consideration in determining a penalty for any subsequent violation.
3. The maximum length overall of any vessel fishing under the provisions of this section shall be 90 feet.
 4. Purse seine or shirred nets shall not exceed 150 fathoms in length.
 5. A person shall not fish on Saturdays, Sundays, and the days on which New Year's Day, Martin Luther King's Birthday, Lincoln's Birthday, Washington's Birthday, Good Friday, Memorial Day, Independence Day, Labor Day, Columbus Day, Election Day, Veteran's Day, Thanksgiving Day, Christmas Day are officially observed by the State of New Jersey.
 6. Fishing shall be conducted only during the hours between sunrise and sunset.
 7. Removal of fish from the purse seine shall be by brailing or dip net only. No fish pump shall be on board any vessel operating under a permit for the purpose of taking Atlantic menhaden for bait purposes.
 8. The possession of any fish, as defined at N.J.S.A. 23:2B-3e, other than Atlantic menhaden on a purse seine vessel harvesting Atlantic menhaden for bait is prohibited.
 - i. The simultaneous possession of Atlantic menhaden and any other fish, as defined at N.J.S.A. 23:2B-3e, and a purse seine, aboard a vessel of any person holding an Atlantic menhaden bait permit or any vessel conducting menhaden fishing operations, shall constitute prima facie evidence of the violation of this subchapter.
 9. No refuse, litter or garbage of any kind, or any quantity of dead fish shall be thrown overboard or released from the vessel or its net(s).
 10. The licensee is responsible for cleaning up any fish, fish-part, refuse, litter, garbage of any kind which is released during any fishing operation or as a result of a fishing operation and must initiate such cleanup no later than 24 hours after the release begins. Upon the licensee's failure to initiate such cleanup within the 24 hour period, the Department may conduct or arrange for the performance of the cleanup. In addition to any other penalties and remedies provided by law, the licensee shall be liable for all costs associated with such cleanup, including any administrative costs incurred by the Department. Such cleanup shall include, but not be limited to, the marine and estuarine waters of the State and adjacent beaches, shorelines and marshes.
 11. No stakes, markers, or buoys designating channels, crab pots, lobster pots, fish pots, or traps, or staked leased shellfish grounds, shall be disturbed by the act of fishing.
 12. Any vessel engaged in fishing for Atlantic menhaden for bait under the provisions of this section shall display, on both sides of the vessel amidship, a yellow capital letter "B" not less than five feet in height on a black square background not less than six feet on a side. For any vessel where the gunnel height is less than eight feet above the waterline at amidship, the ratio of height of the letter "B" to height (or width) of the square black background of the display shall remain in the same proportion, that is, 5:6, but may be reduced in size. In all cases, however, each side of the black background shall be no less than three-quarters of the height of the gunnel at amidship from the waterline.
 13. Any vessel operating under a permit for the purpose of taking Atlantic menhaden for bait purposes shall be required to notify the Department of the intended fishing location of the vessel. The notification shall be made by calling the Division's Marine Enforcement Unit, Bureau of Law Enforcement at (609) 748-2050, prior to fishing in State waters and prior to change of location.
 14. No vessel or person shall fish or utilize any other gear type in the same day it has called in and declared that it is fishing for menhaden for bait purposes.
 15. The annual purse seine quota for the purpose of taking menhaden for bait shall be unlimited.
- (c) The Commissioner, with the approval of the New Jersey Marine Fisheries Council, may modify the annual quota or seasons specified in this subchapter by notice in order to maintain consistency with any fishery management plan approved by the Atlantic States Marine Fisheries Commission pursuant to 16 U.S.C. §5104(b) or to maintain consistency with any Mid-Atlantic Fishery Management Council plan adopted by the National Marine Fisheries Service. The Commissioner, with the approval of the New Jersey Marine Fisheries Council, may modify the seasons specified in this subchapter by notice in order to provide for the optimal utilization of any quotas specified in this section. The Commissioner will review the catch rate in relation to the season quota and if harvest data indicate that upward adjustments in harvest control measures

are warranted to maximize utilization of the available quota within a specific season for a specific fishery, the Commissioner may adjust the above specified control measures to achieve optimal utilization of the total allowable catch. The Department shall publish notice of any such modification by filing and publishing in the New Jersey Register and in the Division's commercial regulation publication. All such notices shall be effective when the Department files the notice with the Office of Administrative Law or as specified otherwise in the notice.

R.1989 d.394, effective July 17, 1989.
See: 21 N.J.R. 107(a), 21 N.J.R. 2035(a).
Amended by R.1996 d.587, effective December 16, 1996 (operative January 1, 1997).
See: 28 N.J.R. 3998(a), 28 N.J.R. 5231(a).
Inserted (b)2i through (b)2iv, in (b)7 added provision relating to fish pumps, and added (b)13 and (b)14.
Amended by R.2000 d.10, effective January 3, 2000.
See: 31 N.J.R. 2555(a), 32 N.J.R. 48(a).

In (b), rewrote the first sentence of the introductory paragraph in 2, and added 15; and added (c).
Amended by R.2001 d.73, effective March 5, 2001.
See: 32 N.J.R. 4435(a), 33 N.J.R. 874(a).
Amended by R.2008 d.15, effective January 7, 2008.
See: 39 N.J.R. 143(a), 40 N.J.R. 126(a).

In (c), inserted "or to maintain consistency with any Mid-Atlantic Fishery Management Council plan adopted by the National Marine Fisheries Service", and inserted the second and third sentences.

Case Notes

State regulation prohibiting fishing did not violate commercial fishing organization's rights under the commerce clause. *Ampro Fisheries, Inc. v. Yaskin*, 247 N.J.Super. 111, 588 A.2d 879 (A.D.1991), certification granted 126 N.J. 340, 598 A.2d 896, affirmed in part, reversed in part 127 N.J. 602, 606 A.2d 1099, certiorari denied 113 S.Ct. 409, 506 U.S. 954, 121 L.Ed.2d 333.

Commercial fishing organization had no rights, under the privileges and immunities clause of the Constitution, which could be violated as a result of state regulations prohibiting fishing. *Ampro Fisheries, Inc. v. Yaskin*, 247 N.J.Super. 111, 588 A.2d 879 (A.D.1991), certification granted 126 N.J. 340, 598 A.2d 896, affirmed in part, reversed in part 127 N.J. 602, 606 A.2d 1099, certiorari denied 113 S.Ct. 409, 506 U.S. 954, 121 L.Ed.2d 333.

State regulation prohibiting fishing did not constitute impermissible disparate treatment. *Ampro Fisheries, Inc. v. Yaskin*, 247 N.J.Super. 111, 588 A.2d 879 (A.D.1991), certification granted 126 N.J. 340, 598 A.2d 896, affirmed in part, reversed in part 127 N.J. 602, 606 A.2d 1099, certiorari denied 113 S.Ct. 409, 506 U.S. 954, 121 L.Ed.2d 333.

State regulation prohibiting fishing did not constitute impermissible use of "police power". *Ampro Fisheries, Inc. v. Yaskin*, 247 N.J.Super. 111, 588 A.2d 879 (A.D.1991), certification granted 126 N.J. 340, 598 A.2d 896, affirmed in part, reversed in part 127 N.J. 602, 606 A.2d 1099, certiorari denied 113 S.Ct. 409, 506 U.S. 954, 121 L.Ed.2d 333.

State regulation prohibiting fishing was within the scope of statute permitting regulation of fish and game. *Ampro Fisheries, Inc. v. Yaskin*, 247 N.J.Super. 111, 588 A.2d 879 (A.D.1991), certification granted 126 N.J. 340, 598 A.2d 896, affirmed in part, reversed in part 127 N.J. 602, 606 A.2d 1099, certiorari denied 113 S.Ct. 409, 506 U.S. 954, 121 L.Ed.2d 333.

State regulation prohibiting fishing was valid under supremacy clause. *Ampro Fisheries, Inc. v. Yaskin*, 247 N.J.Super. 111, 588 A.2d 879 (A.D.1991), certification granted 126 N.J. 340, 598 A.2d 896, affirmed in part, reversed in part 127 N.J. 602, 606 A.2d 1099, certiorari denied 113 S.Ct. 409, 506 U.S. 954, 121 L.Ed.2d 333.

State regulation purporting to regulate fishing within Delaware Bay was severable from other regulations. *Ampro Fisheries, Inc. v. Yaskin*, 247 N.J.Super. 111, 588 A.2d 879 (A.D.1991), certification granted 126 N.J. 340, 598 A.2d 896, affirmed in part, reversed in part 127 N.J. 602, 606 A.2d 1099, certiorari denied 113 S.Ct. 409, 506 U.S. 954, 121 L.Ed.2d 333.

7:25-22.4 Vessel boarding

The operator of, or any other person on board, a fishing vessel subject to this subchapter, shall immediately comply with instructions and signals issued by any law enforcement officer and facilitate a safe boarding and inspection of the vessel, its gear, equipment, catch, and any area where fish may be stored, for the purpose of enforcement of this subchapter.

R.1989 d.394, effective July 17, 1989.
See: 21 N.J.R. 107(a), 21 N.J.R. 2035(a).

Case Notes

State regulation prohibiting fishing did not violate commercial fishing organization's rights under the commerce clause. *Ampro Fisheries, Inc. v. Yaskin*, 247 N.J.Super. 111, 588 A.2d 879 (A.D.1991), certification granted 126 N.J. 340, 598 A.2d 896, affirmed in part, reversed in part 127 N.J. 602, 606 A.2d 1099, certiorari denied 113 S.Ct. 409, 506 U.S. 954, 121 L.Ed.2d 333.

Commercial fishing organization had no rights, under the privileges and immunities clause of the Constitution, which could be violated as a result of state regulations prohibiting fishing. *Ampro Fisheries, Inc. v. Yaskin*, 247 N.J.Super. 111, 588 A.2d 879 (A.D.1991), certification granted 126 N.J. 340, 598 A.2d 896, affirmed in part, reversed in part 127 N.J. 602, 606 A.2d 1099, certiorari denied 113 S.Ct. 409, 506 U.S. 954, 121 L.Ed.2d 333.

State regulation prohibiting fishing did not constitute impermissible disparate treatment. *Ampro Fisheries, Inc. v. Yaskin*, 247 N.J.Super. 111, 588 A.2d 879 (A.D.1991), certification granted 126 N.J. 340, 598 A.2d 896, affirmed in part, reversed in part 127 N.J. 602, 606 A.2d 1099, certiorari denied 113 S.Ct. 409, 506 U.S. 954, 121 L.Ed.2d 333.

State regulation prohibiting fishing did not constitute impermissible use of "police power". *Ampro Fisheries, Inc. v. Yaskin*, 247 N.J.Super. 111, 588 A.2d 879 (A.D.1991), certification granted 126 N.J. 340, 598 A.2d 896, affirmed in part, reversed in part 127 N.J. 602, 606 A.2d 1099, certiorari denied 113 S.Ct. 409, 506 U.S. 954, 121 L.Ed.2d 333.

State regulation prohibiting fishing was valid under supremacy clause. *Ampro Fisheries, Inc. v. Yaskin*, 247 N.J.Super. 111, 588 A.2d 879 (A.D.1991), certification granted 126 N.J. 340, 598 A.2d 896, affirmed in part, reversed in part 127 N.J. 602, 606 A.2d 1099, certiorari denied 113 S.Ct. 409, 506 U.S. 954, 121 L.Ed.2d 333.

State regulation prohibiting fishing was within the scope of statute permitting regulation of fish and game. *Ampro Fisheries, Inc. v. Yaskin*, 247 N.J.Super. 111, 588 A.2d 879 (A.D.1991), certification granted 126 N.J. 340, 598 A.2d 896, affirmed in part, reversed in part 127 N.J. 602, 606 A.2d 1099, certiorari denied 113 S.Ct. 409, 506 U.S. 954, 121 L.Ed.2d 333.

State regulation purporting to regulate fishing within Delaware Bay was severable from other regulations. *Ampro Fisheries, Inc. v. Yaskin*, 247 N.J.Super. 111, 588 A.2d 879 (A.D.1991), certification granted 126 N.J. 340, 598 A.2d 896, affirmed in part, reversed in part 127 N.J. 602, 606 A.2d 1099, certiorari denied 113 S.Ct. 409, 506 U.S. 954, 121 L.Ed.2d 333.

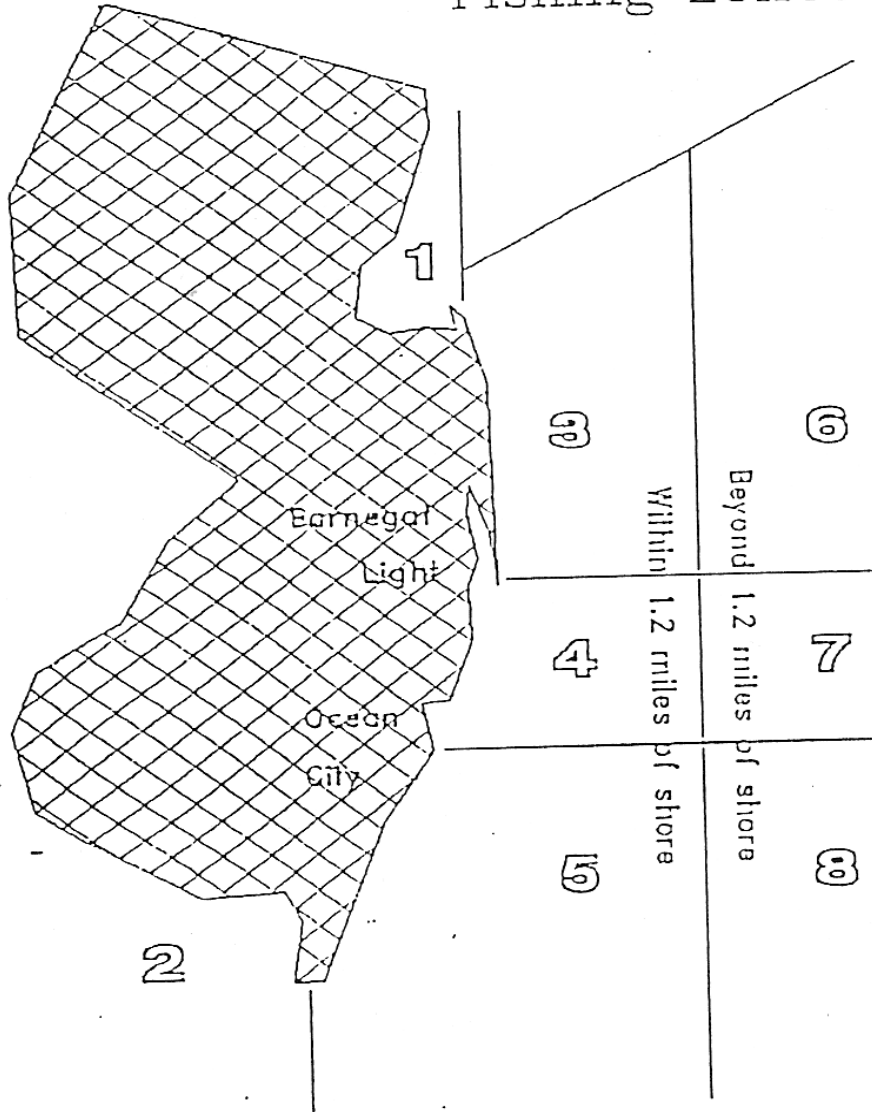
Attachment 2

Menhaden Bait Report					
Name:					
Vessel Name:					
Month:			Year:		
Day	Harvested Pounds	Fishing Zone(s)	Day	Harvested Pounds	Fishing Zone(s)
1			17		
2			18		
3			19		
4			20		
5			21		
6			22		
7			23		
8			24		
9			25		
10			26		
11			27		
12			28		
13			29		
14			30		
15			31		
16					

Attachment 3

ATTACHMENT 5

Fishing Zones



Bill Banker
Fax to: 757-398-6279
US Coast Guard

JUL 23 2013



State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF FISH AND WILDLIFE
Mail Code 501-03
PO BOX 420
Trenton, New Jersey 08625-0420
David Chanda, Director
www.NJFishandWildlife.com
(609) 292-2965

RB
TK
MW
MH
DT

BOB MARTIN
Commissioner

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

Joanne Pellegrino
NMFS - NOAA Toms River
fax: 732-349-4319

Toni Kern
Fax to: 202-289-6051
ASMFC

July 22, 2013

Dear New Jersey Atlantic Menhaden Purse Seine Holder:
New Jersey Atlantic Menhaden Dealer:

As of July 22, 2013, the NJ Division of Fish and Wildlife has determined that the Atlantic Menhaden quota allocated to the commercial PURSE SEINE fishery will be harvested by July 26, 2013. Based upon this information and pursuant to N.J.S.A. 23:3-51.11(d)1 (L. 2013, c.74, s.13) the **New Jersey Atlantic Menhaden commercial PURSE SEINE fishery will be closed as of 11:59 PM, Friday, July 26, 2013.** Fishing for Atlantic menhaden with a purse seine shall be conducted only during the hours between sunrise and sunset.

Therefore, effective 12:00 AM, Saturday, July 27, 2013, no vessel shall land or possess nor shall any dealer accept any Atlantic menhaden harvested through the use of commercial Purse Seine in excess of the by-catch limit of 6,000 pounds per day through December 31, 2013.

If you have any questions, please contact the Bureau of Marine Fisheries at 609-748-2020.

Sincerely,

Brandon Muffley
Bureau of Marine Fisheries, Chief

DC/PC/KS



State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF FISH AND WILDLIFE

Mail Code 501-03

PO BOX 420

Trenton, New Jersey 08625-0420

David Chanda, Director

www.NJFishandWildlife.com

(609) 292-2965

CHRIS CHRISTIE

Governor

KIM GUADAGNO

Lt. Governor

BOB MARTIN

Commissioner

August 15, 2013

Dear New Jersey Atlantic Menhaden Purse Seine Holder:
New Jersey Atlantic Menhaden Dealer:

The New Jersey Division of Fish and Wildlife has determined that the **Atlantic menhaden Purse Seine** fishery was closed prematurely on July 26, 2013. Based upon this information and pursuant to N.J.S.A. 23:3-51.11(d)1 (L. 2013, c.74, s.13), the New Jersey Atlantic menhaden purse seine fishery will re-open on Monday, August 19, 2013 and will close on Friday, August 23, 2013.

Purse seine vessels will be **authorized to make 2 trips during the 5 day period**, with no more than one trip per day. Any vessel fishing for Atlantic menhaden during this period is required to notify the New Jersey Bureau of Law Enforcement at (609) 748-2050 prior to fishing and indicate the trip number (i.e. one or two).

Effective 12:00 AM, Saturday, August 24, 2013, no vessel shall land or possess nor shall any dealer accept any Atlantic menhaden harvested through the use of commercial Purse Seine in excess of the by-catch limit of 6,000 pounds per day through December 31, 2013.

If you have any questions, please contact the Bureau of Marine Fisheries at 609-748-2020.

Sincerely,

A handwritten signature in cursive script that reads "Brandon Muffley".

Brandon Muffley
Bureau of Marine Fisheries, Chief

DC/PC/KS



State of Delaware
Atlantic Menhaden 2013 Annual Compliance Report
April 1, 2014

I. Introduction

Delaware's 2013 Atlantic menhaden landings 2013 were 125,909 pounds. Delaware reached its quota of 49,229 pounds (0.01% of the coastwide quota) on May 13, 2013 and the remainder of its 2013 landings were landed as bycatch.

II. Request for *de minimis*

In 2012 and 2013, Delaware landed 140,375 pounds and 125,909 pounds of Atlantic menhaden, respectively, with the entirety of the landings as bait. There were 140 million pounds landed coast wide in 2012, and 81.6 million pounds landed in 2013 as bait. Delaware's landings were .01% of the total coast-wide bait landings for the most recent two years, and qualify Delaware for *de minimis* status, but Delaware chooses not to request it.

III. Previous calendar year's fishery

Directed Fishery

- a. Delaware harvested 49,201 pounds during the open season for Atlantic menhaden.
- b. The directed fishery for Atlantic menhaden was closed on May 13, 2013 when the quota was reached.
- c. Delaware did not participate in a quota transfer in 2013.

Bycatch Fishery

- a. All bycatch landings occurred after the closure of the directed fisheries [notice of closure attached]. Delaware landed 76,708 pounds in its bycatch fishery.
- b. No individual trip in 2013 exceeded the 6,000 pounds bycatch allowance. In 2013, 99% of bycatch trips landed less than 1,000 pounds. All bycatch landings occurred from gill nets.

Episodic Event Set Aside

- a. Delaware did not participate in the episodic event set aside in 2013.

IV. Mandatory Monitoring Programs

- a. Delaware instituted a monthly logbook program in 1985 which required commercial fisherman to report their catch at the trip level. Data elements include species, amount harvested, location, port landed, amount of effort and gear characteristics. In 2014, Delaware mandated that all menhaden landing be reported on a daily basis through an IVR(Interactive Voice Response System) in response to Amendment 2.
- b. Delaware does not have a purse or bait seine fishery for Atlantic menhaden.
- c. Amendment 2 requires one 10-fish sample to be taken from the commercial catch and Delaware collected four 10-fish samples from the commercial fishery in 2013. All 40 fish, which were taken from one sampling event, were measured, weighed and 34 were aged.
- d. Delaware does not have a pound net fishery.

V. Planned management programs for the current year

- a. Delaware expect no changes for the management for the current year.
- b. Delaware expects no changes in monitoring for the current year.

Table 1. Commercial landings of Atlantic Menhaden in Delaware from 1985 to 2013 as reported through fisherman logbooks.

Year	Pounds
1985	176,135
1986	20,081
1987	22,034
1988	127,713
1989	104,382
1990	167,116
1991	278,774
1992	130,833
1993	164,046
1994	78,672
1995	101,388
1996	100,063
1997	55,733
1998	58,048
1999	78,551
2000	47,980
2001	53,257
2002	80,261
2003	42,593
2004	75,635
2005	120,658
2006	111,405
2007	81,850
2008	72,970
2009	69,476
2010	51,933
2011	64,566
2012	130,725
2013	125,909

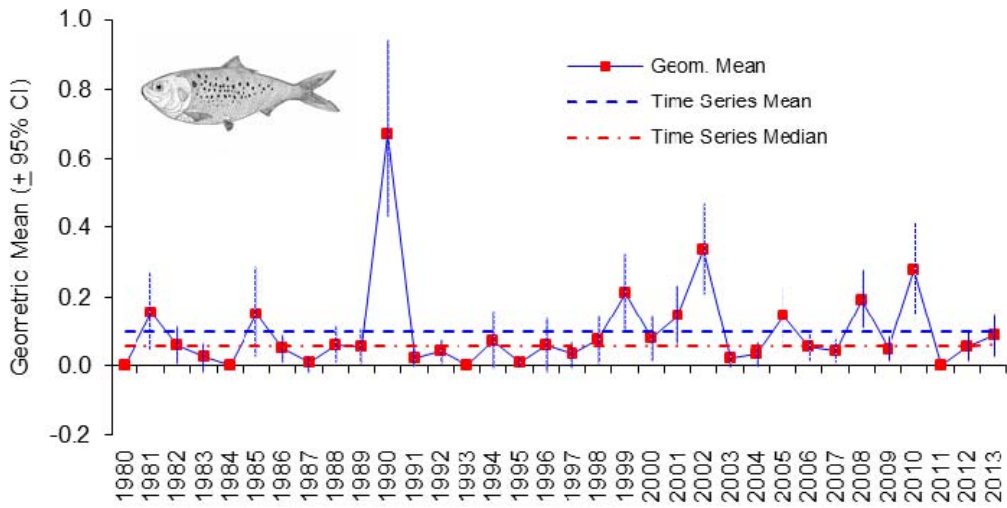


Figure 1. Index of young-of-the-year Atlantic menhaden abundance, time series (1990 – 2013) mean and time series median as measured by 16-foot trawl sampling in the Delaware estuary.

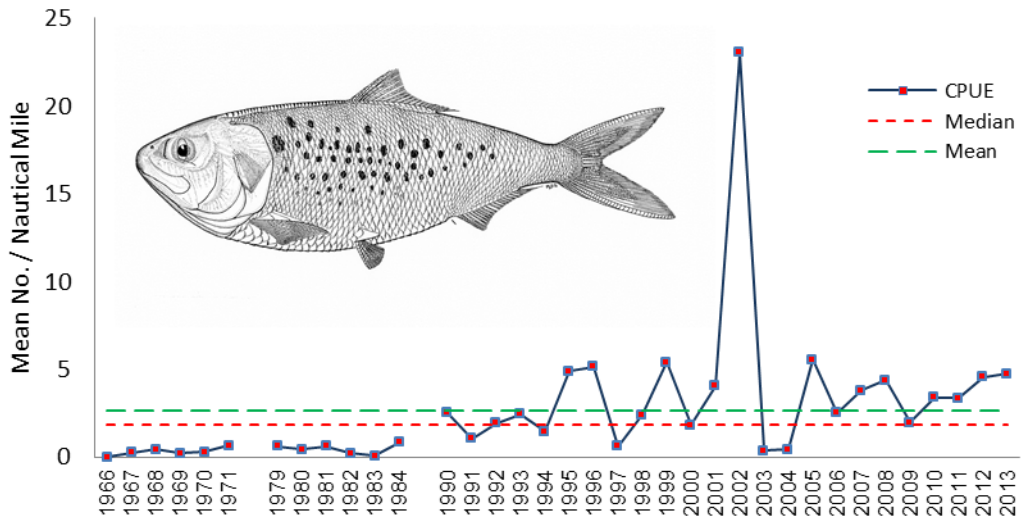


Figure 2. Atlantic menhaden relative abundance (mean number per nautical mile), time series (1966 – 2013) mean and median as measured in 30-foot trawl sampling in the Delaware Bay.

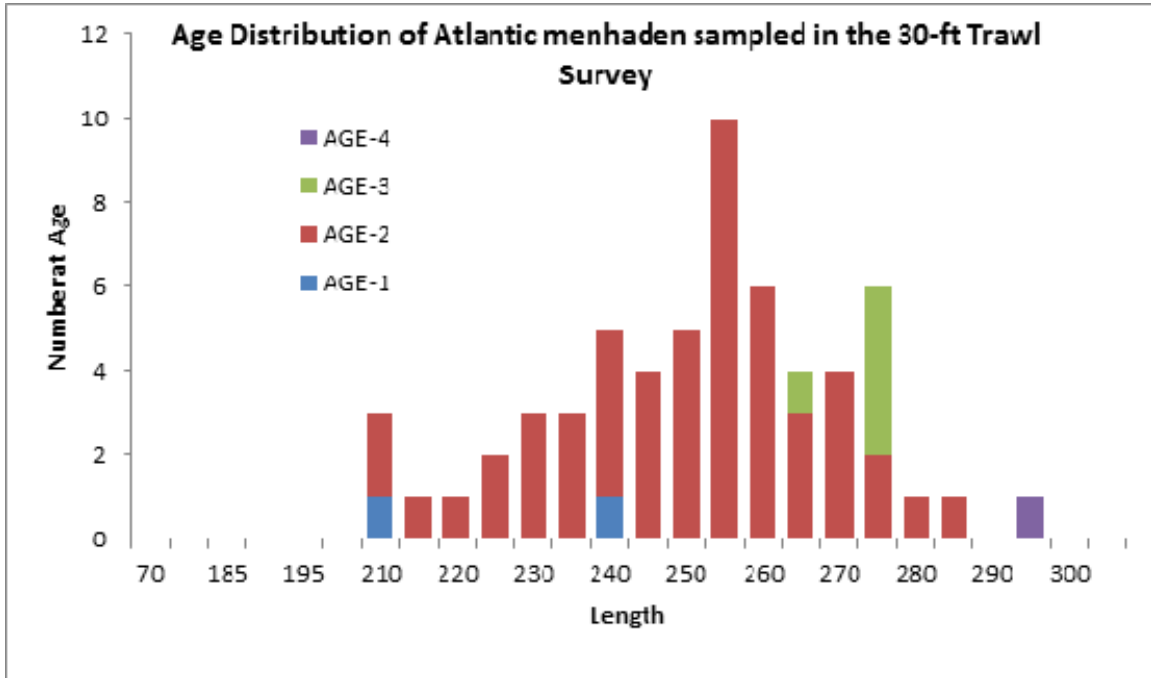


Figure 3. Age distribution of Atlantic menhadensampled in the 30 ft trawl survey in 2013.

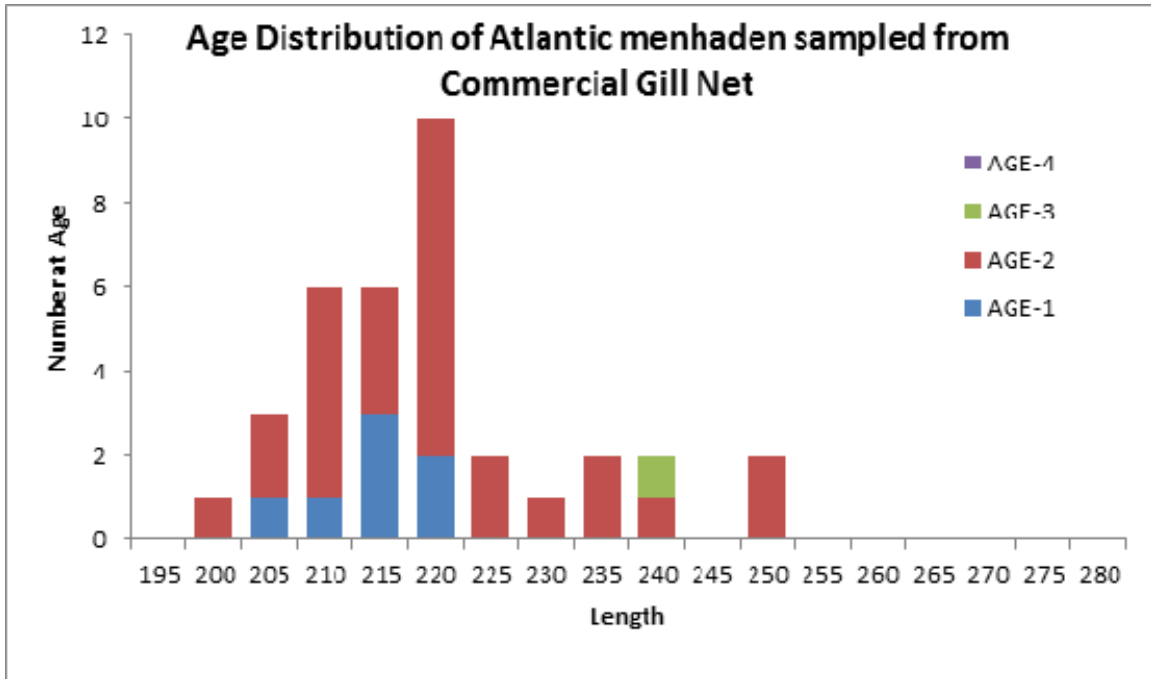


Figure 4. Age distribution of Atlantic menhadensampled from the commercial gill net fishery in 2013.



STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
& ENVIRONMENTAL CONTROL
DIVISION OF FISH & WILDLIFE
89 Kings Highway
Dover, Delaware 19901

OFFICE OF THE
DIRECTOR

Phone: (302) 739-9910
Fax: (302) 739-6157

May 23, 2013

NOTICE TO DELAWARE COMMERCIAL FISHERMEN

THE DELAWARE ATLANTIC MENHADEN TOTAL ALLOWABLE CATCH (TAC) WAS REACHED ON MAY 13, 2013. ATLANTIC MENHADEN MAY CONTINUE TO BE LANDED IN 2013 AS BYCATCH.

In accordance with Amendment 2 of the Interstate Fisheries Management Plan for Atlantic Menhaden (Atlantic States Marine Fisheries Commission 2012), the Delaware Division of Fish and Wildlife has determined that Delaware's 2013 Atlantic menhaden TAC of 49,233 lbs. (22.33 MT) was reached on May 13, 2013.

As per Amendment 2, you may continue to land Atlantic menhaden, but you may not target Atlantic menhaden. Atlantic menhaden may be your entire daily catch and still be considered bycatch provided that you report you were targeting other fish. You will have a daily landings limit of 6,000 lbs. and all remaining landings in 2013 will be reported as bycatch.

Please contact the Fisheries Section at 739-9914 if you have any questions. Thank you for your cooperation.

John H. Clark
Fisheries Section Administrator



Celebrating Delaware's Fish & Wildlife Federal Funding Partnership

Find us on Facebook <http://www.facebook.com/DelawareFishWildlife>



Martin O'Malley, Governor
Anthony G. Brown, Lt. Governor
Joseph P. Gill, Secretary
Frank W. Dawson III, Deputy Secretary

Maryland Atlantic Menhaden (*Brevoortia tyrannus*) Compliance Report to the Atlantic States Marine Fisheries Commission - 2013

Prepared by

Harry W. Rickabaugh Jr.

**Maryland Department of Natural Resources
Fisheries Service**

April 1, 2014

I. Request for *de minimis*.

Maryland does not qualify for *de minimis* status.

II. 2013 Fishery

Directed Fishery

- a. Maryland's 2013 total commercial landings (open fishery plus bycatch) were 6,908,913 pounds. The open fishery ran from January 1, 2013 to June 28, 2013 with a total harvest of 4,122,830 pounds, below Maryland's quota of 5.17 million pounds. Pound nets accounted for 92% of total harvest and gill nets accounted for 7% of total harvest (Table 1).
- b. The directed fishery for Atlantic menhaden was closed on June 29, 2013 at 12:01am by public notice (see Appendix A for more detail). Due to the timing of Amendment 2 implementation and the requirements of Maryland's regulatory process, Maryland could not modify menhaden fishing regulations, including reporting requirements and fishery closure, prior to June 29, 2013. Since the commercial reporting system in place prior to June 29th did not allow for timely quota monitoring, the fishery was closed based on when the quota would have been met in 2012. Between 2006 and 2012 (the only years with trip level data), Maryland attained its menhaden quota across a wide range of dates with the earliest being June 15 in 2012 and latest being September 14 in 2006.
- c. Maryland did not participate in any quota transfers for the Atlantic menhaden fishery.

Bycatch Fishery

- a. Total reported bycatch landings in 2013 were 2,786,083 pounds.
- b. During the bycatch portion of the menhaden season which began on June 29, pound net fishermen with a menhaden bycatch permit were allowed a 6,000 pound bycatch per vessel per day. In accordance with Maryland's implantation plan for Amendment 2, if two licensed fishermen, both holding a menhaden bycatch permit, or one licensed fishermen holding two or more striped bass permits were onboard one vessel they were allowed to land 12,000 pounds per day per vessel. If no menhaden bycatch permit holder was on board, or any gear other than pound nets were used, the limit was 1,500 pounds per day per vessel. For the 2013 season, Maryland DNR issued 94 menhaden bycatch permits to qualified pound netters. Fifty-five (55) permit-holders reported menhaden as bycatch; 23 of these individuals used the new electronic daily reporting system. The rest submitted monthly reports on paper.

Within the bycatch portion of the fishery, pound nets accounted for 2,746,244 pounds, gillnets 20,534 pounds and all other gear combined 19,305 pounds. No daily landing values from the 268 non pound net trips exceeded 1,100 pounds; only eight of the trips were 1,000 pounds or more and mean catch from non pound net bycatch trips was 149 pounds per trip. Pound net bycatch trips averaged 3,114 pounds per day. Ninety percent of the 883 pound net bycatch trips landed 6,000 pounds or less and 37% landed 1,000 pounds or less (Figure 1). A detailed analysis of Maryland's menhaden harvest between 2008 and 2012 indicates that 50%

of Maryland's annual menhaden catch is harvested by four license holders. The concentration of the menhaden fishery in Maryland results in the 6,000 bycatch being primarily limited to those few individuals who land half the catch. Of the 883 pound net trips reported during the bycatch period 41 reported catching a combined 120,770 pounds over their limits. One fisherman accounted for the majority of bycatch trips over the limit. This fisherman did not meet the requirements for 12,000 per day eligibility, but appeared to be fishing to this level. Of the nine remaining trips catching over the limit, four of the trips were in the first week of the bycatch regulations. None of these fishermen exceeded their trip limits after the first week, which may indicate they did not initially understand the regulations.

In an effort to assess the impacts of the 2013 management program, including bycatch, on Maryland's overall harvest in 2013, an additional analysis was conducted. The results indicate that the bycatch allowance, as implemented, did reduce the potential 2013 harvest by approximately 31% as compared to having an unregulated fishery (see Appendix B for more detail).

Episodic Event Set Aside

- a. Maryland did not participate in the episodic event set aside.

III. Mandatory Monitoring Programs

- a. Due to the timing of Amendment 2 implementation and the requirements of Maryland's regulatory process, Maryland could not modify menhaden fishing regulations, including reporting requirements, prior to June 29, 2013. All fishermen were required to report the quantity of fish landed by species, gear type, day, and area fished, as well as the duration the gear was in the water, amount of gear used, number of crew and hours fished using forms returned monthly to MD DNR for all of 2013. Beginning on June 29, 2013 when the regulations went into effect and the unlimited fishery closed, any fisherman harvesting with a 6,000 menhaden bycatch permit was required to report daily via text message from a cell phone or an online form. Required information reported by menhaden bycatch permit holders included their permit number, whether or not more than one permit holder was onboard, total number of nets fished, soak time of each net fished and quantity of menhaden harvested.

- b. Purse seining is not allowed in Maryland waters.

- c. MD DNR fisheries biologists sampled commercial pound nets once per week in Maryland's portion of the Chesapeake Bay from May 28, 2013 through September 3, 2013. Sites were located in the main stem of the Chesapeake Bay and inside the mouth of the Potomac River. Ten to twenty-five age and length samples were taken at each net and additional lengths were taken to reach 50 total measurements per day. All measurements were to the nearest mm fork length (FL). In 2013 165 age samples and 395 lengths were taken from the Chesapeake Bay during 15 sampling events, and 161 ages and 367 lengths were taken from the Potomac during 7 sampling events. Ages one through seven were

present in the Chesapeake Bay samples with ages one through three accounting for 80% of sampled fish (Figure 2). Menhaden sampled from the Potomac ranged from age one to six with 88% of sampled fish between ages one and four (Figure 3). The mean FL in both the Chesapeake Bay and Potomac Regions were 248 mm and 253 mm, respectively. Length frequency distributions were generated using 20 mm FL length groups, and were similar for both regions peaking at the 250 mm FL group (Figures 4 and 5).

d. As indicated in section III a. above all pound net fishermen were reporting daily catches, the duration nets fished and number of nets fished throughout 2013 using paper forms submitted monthly. Daily electronic reporting by menhaden landing permit holders, that began on June 29, 2013, collected these daily elements, plus the number of days each net fished. The paper forms do not have effort by net, so fishermen who fished nets with different soak times in the same day would need to average the nets soak times. Examination of the data suggests this may not be the case or fishermen are rounding to the nearest whole day (very few days fished values have decimal points).

IV. Planned management programs for 2014

a. Maryland will be requiring all pound net fishermen landing menhaden to get a menhaden bycatch permit and to comply with the daily electronic reporting requirement from April, 1 2014 through the end of the calendar year. MD DNR will monitor harvest through the electronic reporting system and close the open fishery prior to the quota being reached. A percentage of the quota will be set aside as a buffer to account for landings in non pound net gear and for late paper reports submitted prior to the mandatory electronic reporting that begins April first. After the open fishery closes, all vessels landing menhaden from pound nets as bycatch and holding a menhaden bycatch permit will be restricted to a maximum of 6,000 pounds per day regardless of the number of licensees or permits onboard. All vessels fishing any other gear, and vessels fishing pound nets and not possessing a menhaden bycatch permit, will be restricted to a 1,500 pound bycatch limit.

b. MD DNR plans to continue monitoring commercial pound net catches at sea to obtain age and length samples.

Table 1. Maryland commercial landings in pounds by gear and year, 1935 - 2013.

Year	Total	Pound net	Gill nets	Fyke net	Seine	Other
1935	7,000					7,000
1936	43,400					43,400
1937	15,000					15,000
1938	62,800					62,800
1939	16,000					16,000
1940	104,000					104,000
1941	138,000					138,000
1942	175,200					175,200
1944	183,232	182,812		420		
1945	40,584	39,684	900			
1946	394,313	362,534	21,200		10,579	
1947	125,444	89,469	425		550	35,000
1948	564,471	543,221	0		950	20,300
1949	1,680,233	1,551,865	8,800	200	119,368	
1950	1,096,887	1,008,669	54,118		34,000	100
1951	430,927	346,085	55,444		27,798	1,600
1952	1,444,296	1,416,171	20,845	615	6,665	
1953	2,151,000	2,081,517	46,128	4,310	18,845	200
1954	3,883,103	3,827,744	50,859		4,500	
1955	1,939,953	1,858,038	2,408		79,507	
1956	1,375,315	1,359,405	2,675	150	13,085	
1957	2,398,628	2,291,790	15,958		90,880	
1958	2,273,739	2,186,871	7,945		78,923	
1959	2,203,897	2,169,987	8,571	10,610	14,729	
1960	2,903,875	2,882,855	4,940	0	16,080	
1961	3,577,743	1,186,531	27,704	500	42,208	2,320,800
1962	4,316,100	1,805,500	27,900		16,700	2,466,000
1963	3,292,900	1,380,000			3,400	1,909,500
1964	5,706,300	1,299,900	32,100	700	11,300	4,362,300
1965	8,332,800	2,991,700	28,900		1,700	5,310,500
1966	5,504,500	2,606,000	31,500		12,000	2,855,000
1967	3,000,500	2,897,200	79,200		24,100	
1968	4,360,300	3,962,300	383,400		14,600	
1969	3,456,400	3,257,500	195,300		3,600	
1970	3,836,900	3,446,500	344,500	200	45,700	
1971	5,957,600	5,650,200	276,700		30,700	
1972	7,104,300	6,040,600	1,043,900		18,400	1,400
1973	9,657,300	9,472,500	182,500		2,300	
1974	5,523,100	5,330,400	181,700	6,800	4,200	

Table 1. Continued

Year	Total	Pound net	Gill nets	Fyke net	Seine	Other
1975	6,105,900	5,842,500	241,900	1,600	18,600	1,300
1976	5,379,700	5,174,500	183,000	2,900	19,200	100
1977	8,381,100	8,228,900	147,200	100	4,600	300
1978	7,115,900	7,001,900	112,400	400	0	1,200
1979	5,608,100	5,471,200	129,700	200	3,000	4,000
1980	8,715,266	8,536,396	126,390	287	51,205	988
1981	10,701,070	10,609,060	82,728	12	8,970	300
1982	8,946,683	8,794,518	150,788	1,377		
1983	6,605,705	6,431,147	167,710	2,563	50	4,235
1984	5,363,823	5,038,318	235,845	20,420	69,140	100
1985	5,372,193	5,279,976	84,716	7,501		
1986	5,449,350	5,361,061	85,121	3,146		22
1987	5,793,683	5,655,934	58,771	16,651		62,327
1988	6,430,164	6,228,125	147,589	15,626		38,824
1989	6,166,236	6,098,520	60,006	2,630		5,080
1990	1,662,275	1,602,438	59,182	655		
1991	3,540,179	3,387,725	131,013	636		20,805
1992	1,777,088	1,624,533	72,056	80,089		410
1993	2,326,613	2,252,894	69,944	14,750		2,300
1994	2,369,071	2,144,891	172,429	41,830		9,921
1995	4,264,754	4,070,791	185,657	5,706		2,600
1996	3,906,808	3,713,620	189,726	2,502	50	910
1997	3,457,237	3,297,418	155,649	4,170		
1998	2,933,818	2,750,801	175,351	2,290		5,376
1999	4,460,534	4,322,063	126,429	18,400		10,202
2000	3,935,307	3,778,100	136,429	20,664		114
2001	3,970,243	3,810,860	149,143	10,240		0
2002	4,023,389	3,869,847	132,227	21,225		90
2003	3,163,252	2,917,925	241,336	2,996		995
2004	5,369,952	5,141,842	226,421	1,670		19
2005	10,635,776	10,406,224	202,105	5,921	506	21,020
2006	6,841,296	6,656,846	171,768	4,170	15	8,497
2007	11,370,064	10,095,686	1,265,717	5,546	1,975	1,140
2008	8,153,008	7,956,418	184,839	10,934	0	817
2009	7,756,192	7,406,050	341,265	7,730	145	1,002
2010	6,903,300	6,192,220	592,440	97,040		21,600
2011	6,506,430	5,937,637	511,890	56,699		204
2012	13,737,314	13,083,682	598,087	38,360	904	16,281
2013	6,908,913	6,389,382	482,641	4,970	0	31,920

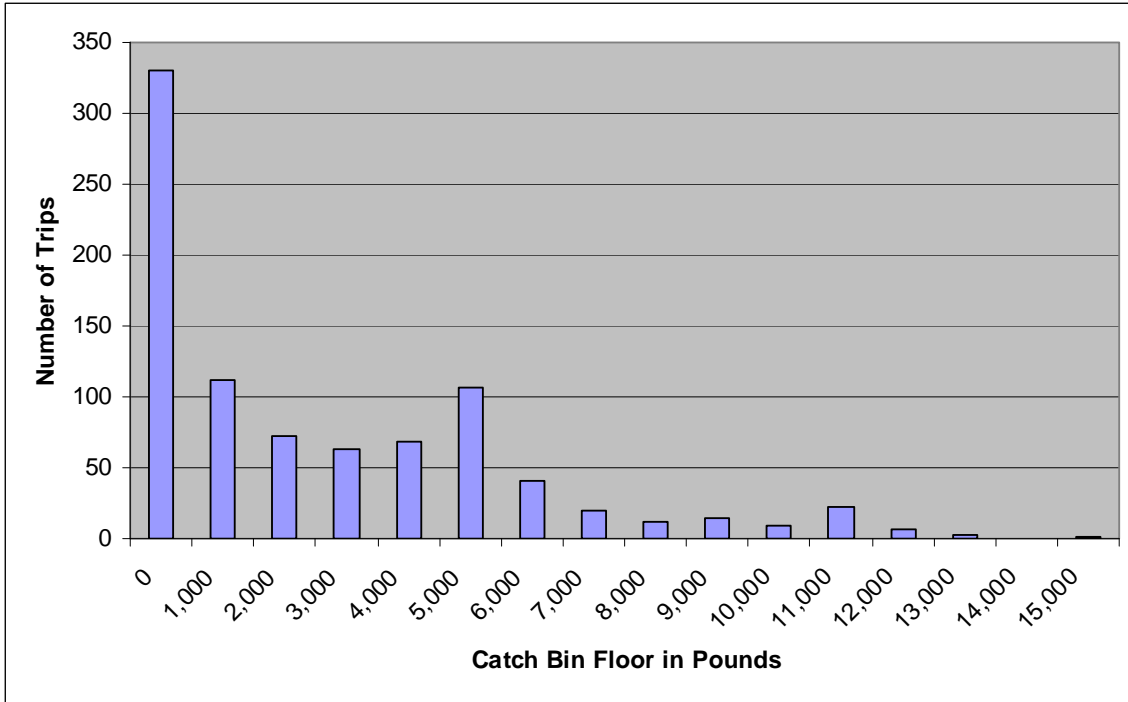


Figure 1. Number of trips landing Atlantic menhaden bycatch by 1,000 pound bin.

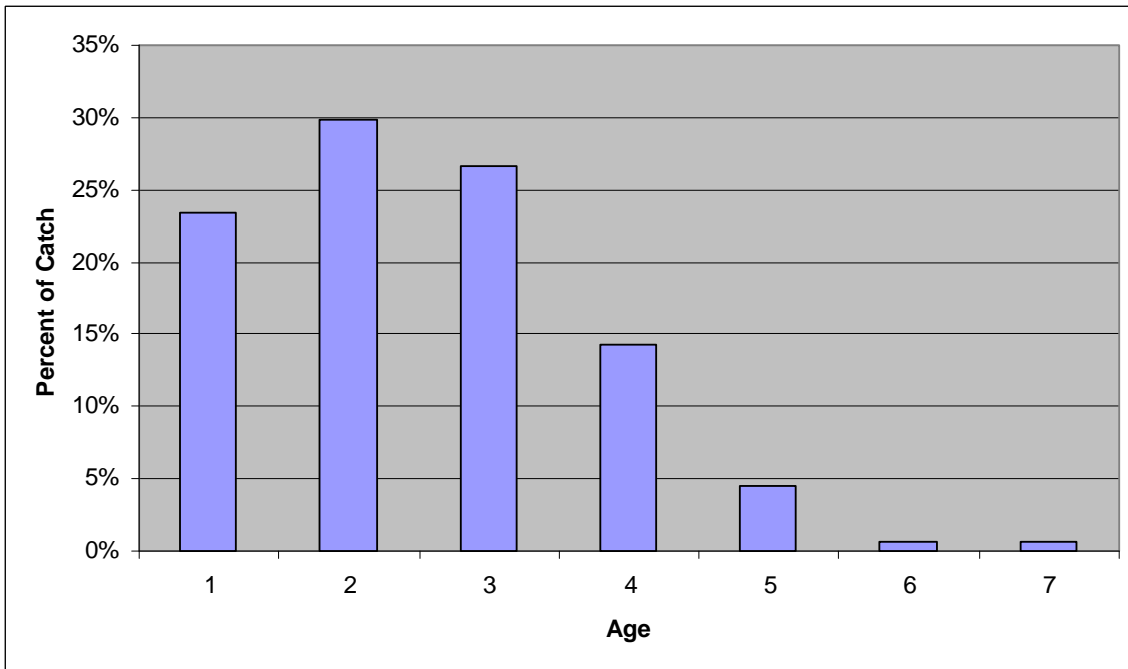


Figure 2. Chesapeake Bay menhaden age frequency in years, 2013.

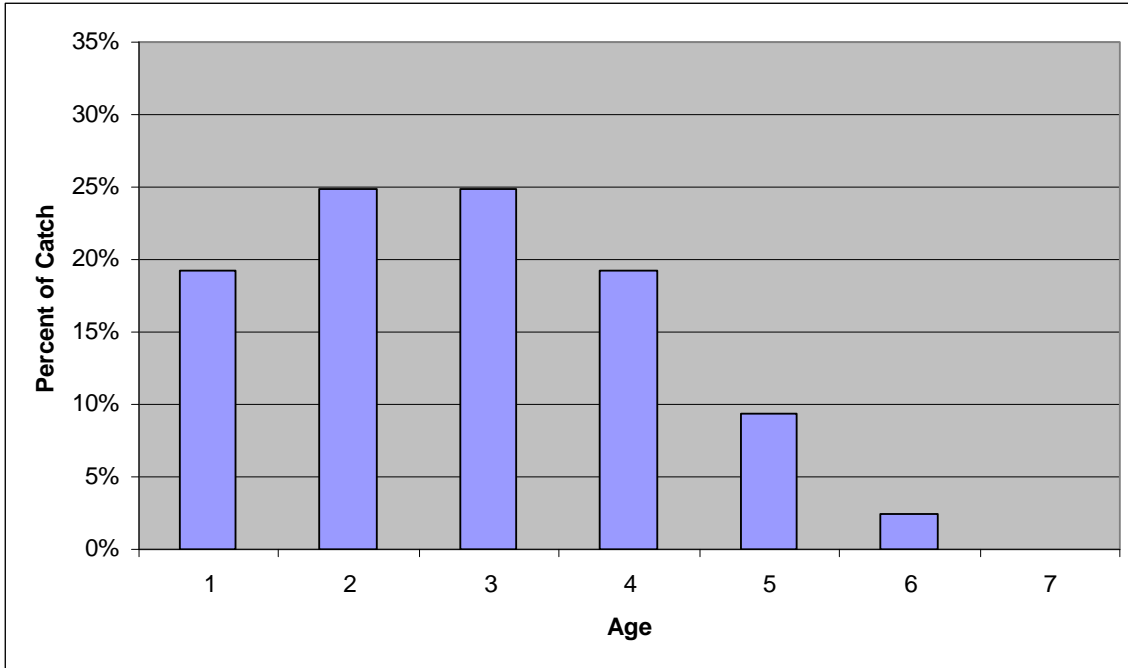


Figure 3. Lower Potomac River menhaden age frequency in years, 2013.

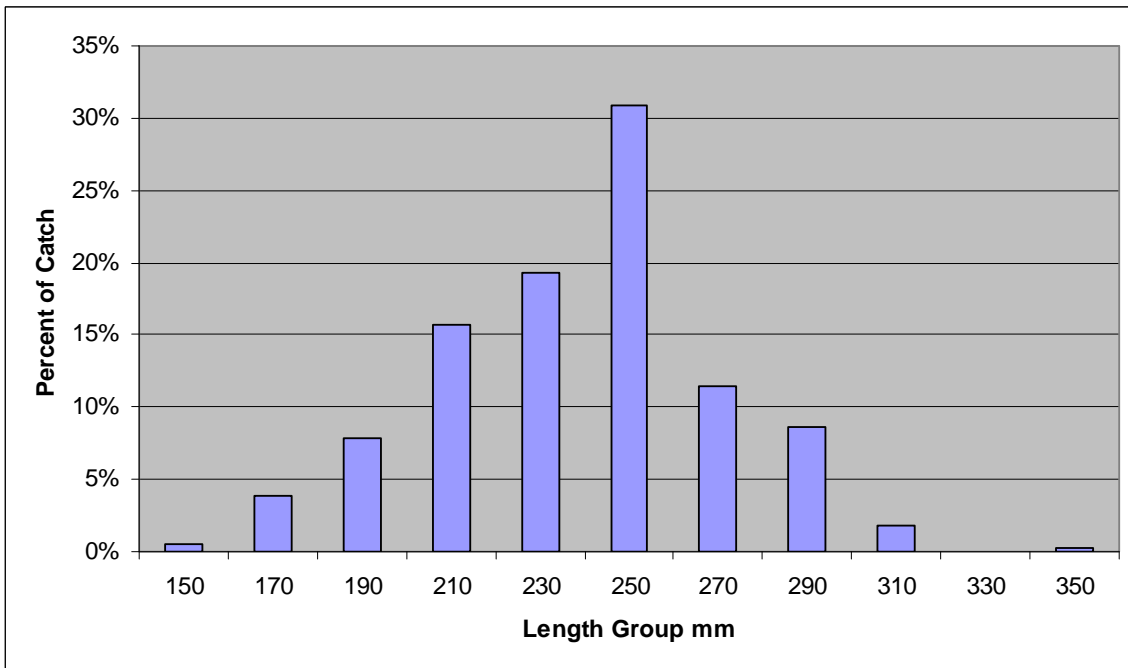


Figure 4. Chesapeake Bay menhaden length frequency in mm fork length, 2013.

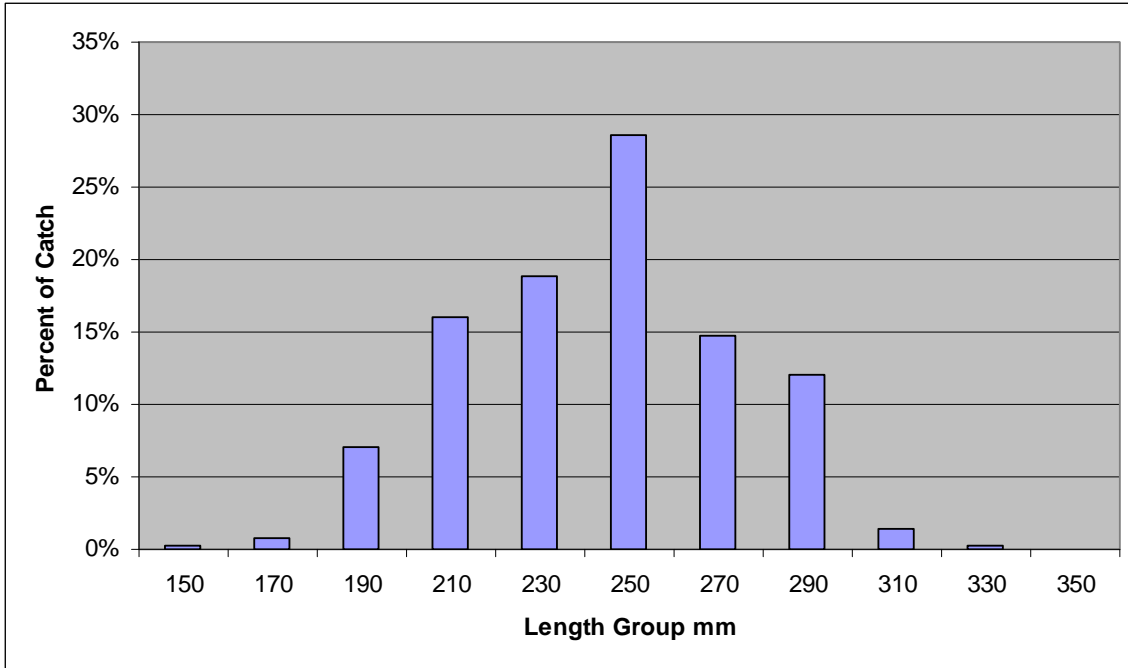


Figure 5. Lower Potomac River menhaden length frequency in mm fork length, 2013.

Appendix A

Regulations and public notices used to regulate Maryland's 2013 Atlantic menhaden fishery.

The following is a copy of Maryland's 2013 menhaden regulation as written in COMAR:

08.02.05.07

.07 Atlantic Menhaden.

A. Quota.

(1) The annual total allowable landings of Atlantic menhaden for the commercial fishery is set by the Atlantic States Marine Fisheries Commission and shall be published through a public notice issued in accordance with §F of this regulation.

(2) Any annual overages of the quota will be deducted from the subsequent year's quota.

B. Seasons. A public notice shall be issued in accordance with §F of this regulation when the quota and season are approved by the Atlantic State Marine Fisheries Commission.

C. Commercial Catch Limits.

(1) Prior to the State quota in §A of this regulation being met or exceeded, there is no catch limit for Atlantic menhaden.

(2) Upon the State quota being met or exceeded, the catch limit for Atlantic menhaden and the harvest rate at which an Atlantic menhaden bycatch allowance landing permit is required shall be established and may be modified through a public notice issued in accordance with §F of this regulation.

D. Atlantic Menhaden Bycatch Allowance Landing Permits.

(1) An individual may apply for an Atlantic menhaden bycatch allowance landing permit if, as of February 18, 2013, the individual had a pound net site registered with the Department.

(2) An individual may be issued only one Atlantic menhaden bycatch allowance landing permit.

(3) A permittee shall have in possession the Atlantic menhaden bycatch allowance landing permit when engaged in permitted activities.

(4) Atlantic menhaden bycatch allowance landing permits may not be transferred and are valid only for the named individual on the permit card.

(5) A permittee shall be on board any boat harvesting Atlantic menhaden under an Atlantic menhaden bycatch allowance landing permit.

E. Reporting.

(1) In addition to the requirements of Natural Resources Article, §4-206, Annotated Code of Maryland, an individual in possession of an Atlantic menhaden landing permit shall report in the manner specified by the Department.

(2) The Department may suspend the holder of an Atlantic menhaden landing permit from participation in the menhaden fishery for up to 90 days per violation for failing to comply with §E(1) of this regulation.

(3) The Department may deny an application for an Atlantic menhaden landing permit for failing to comply with §E(1) of this regulation during the previous season.

F. General.

(1) When the menhaden quota, established by the Atlantic States Marine Fisheries Commission, has been met, the Secretary may issue a public notice on the Fisheries Service website to modify the season and catch limits in compliance with the Atlantic States Marine Fisheries Commission Interstate Fishery Management Plan.

(2) The Secretary shall make a reasonable effort to disseminate a public notice issued under this section through various other media so that an affected individual has a reasonable opportunity to be informed.

(3) A violation of the restrictions set by the Secretary in accordance with section is a violation of this regulation.

The following public notices were issued in accordance with sections A and F above to close the Atlantic menhaden season and establish bycatch limits:

Issued 6/21/2013

PUBLIC NOTICE
The Maryland Department of Natural Resources
Fisheries Service
2013 Commercial Atlantic Menhaden Regulations

The Maryland Department of Natural Resources pursuant to COMAR 08.02.05.07F, an emergency regulation approved by the Joint Committee on Administrative, Executive & Legislative Review (AELR) on June 17, 2013, announces changes to the commercial Atlantic menhaden fishery. The annual total allowable landings of Atlantic menhaden for Maryland, as established by the Atlantic States Marine Fisheries Commission (ASMFC), is 5.12 million pounds. Due to projected harvest levels, the unlimited commercial menhaden fishery will close at 12:01am, Saturday, June 29th, 2013, and bycatch provisions will go into effect. The following catch limits will govern the Atlantic menhaden bycatch fishery:

- For commercial licensees not in possession of an Atlantic Menhaden Bycatch Allowance Landing Permit: 1,500 pounds per vessel per day.
- For commercial licensees in possession of an Atlantic Menhaden Bycatch Allowance Landing Permit issued in their name by the Department: 6,000 pounds per permittee per day. There is also a 12,000 pound per vessel per day landing limit.

Joseph P. Gill
Secretary
Maryland Department of Natural Resources

Tags: *Commercial, Menhaden*

Issued 6/25/2013

PUBLIC NOTICE
The Maryland Department of Natural Resources
Fisheries Service
2013 Commercial Atlantic Menhaden Regulations
Corrected Limits

State Wide

The Maryland Department of Natural Resources pursuant to COMAR 08.02.05.07F, an emergency regulation approved by the Joint Committee on Administrative, Executive & Legislative Review (AELR) on June 17, 2013, announces changes to the commercial Atlantic menhaden fishery. The annual total allowable landings of Atlantic menhaden for Maryland, as established by the Atlantic States Marine Fisheries Commission (ASMFC), is 5.12 million pounds. Due to projected harvest levels, the unlimited commercial menhaden fishery will close at 12:01am, Saturday, June 29, 2013, and bycatch provisions will go into effect. The following catch limits will govern the Atlantic menhaden bycatch fishery:

- For commercial licensees not in possession of an Atlantic Menhaden Bycatch Allowance Landing Permit: 1,500 pounds per vessel per day.
- For commercial licensees in possession of an Atlantic Menhaden Bycatch Allowance Landing Permit issued in their name who have not been issued a striped bass pound net permit, or have been issued one striped bass pound net permit: 6,000 pounds per permittee per day.
- For commercial licensees in possession of an Atlantic Menhaden Bycatch Allowance Landing Permit issued in their name who have also been issued two or more striped bass pound net permits: 12,000 pounds per permittee per day. Permittees must be in possession of both their Atlantic Menhaden Bycatch Allowance Landing Permit and their multiple striped bass pound net permits in order to take this amount of menhaden.

For vessels with permits on board, regardless of the number of permits, there is a 12,000 pound per vessel per day landing limit.

Appendix B

Evaluation of Maryland's 2013 Atlantic menhaden landings

In order to determine what affect the 2013 management strategy had on menhaden landings an estimate of unregulated 2013 landings was made. Maryland's menhaden landings have been variable the past 10 years. For example landings by year from 2004 to 2007 in millions of pounds were 5.4, 10.6, 6.8 and 11.4, respectively. Landings were less variable from 2008 to 2011, declining from 8.1 to 6.5 million pounds, but increased substantially to 13.7 million pounds in 2012. Trip level harvest data is available from 2006 to the present. The proportion of pounds of menhaden landed prior to Maryland's 2013 close date of June 29th (Last day of open fishing was June 28, 2013.) to total annual menhaden landings was calculated for 2006 to 2012. These values ranged from 39.5% to 43.8%, with a mean value of 41.2% (Table 1). Despite the wide range in annual harvest, the percentage caught before and after June 29th by year has been very similar. The 2013 pre closure harvest of 4,122,830 pounds was then divided by the minimum, maximum and mean values listed above to calculate a range of estimated unregulated 2013 Maryland menhaden landings. The mean value is the most likely estimate with the maximum pre close percentage resulting in the minimum estimate and the minimum per close percentage resulting in the maximum harvest estimate.

Maryland is estimating that the unregulated 2013 landings would have been 10,014,398 pounds, with minimum and maximum values of 9,416,275 pounds and 10,424,540 pounds, respectively (Table 2). These estimates indicate a reduction in landings in 2013 of 26.6% to 33.7%, with the most likely value being 31.0%. Even though Maryland only had a modest reduction compared to the 2009-2011 reference period average of 7,055,307 pounds, this analysis indicates it is likely over 3 million pounds of menhaden that would have been harvested were released in 2013.

Table 1. Annual total harvest, harvest prior to June 29, harvest from June 29 to end of year and proportion of total harvest captured prior to June 29, 2006 – 2013.

Year	Total Harvest	Pre June 29	Post June 28	Pre close proportion of total
2006	6,841,296	2,388,956	4,452,340	0.3492
2007	11,370,064	4,759,987	6,610,077	0.4186
2008	8,153,008	3,569,720	4,583,288	0.4378
2009	7,766,192	3,269,304	4,496,888	0.4210
2010	6,903,300	2,730,205	4,173,095	0.3955
2011	6,506,430	2,756,531	3,749,899	0.4237
2012	13,737,314	5,989,893	7,747,421	0.4360
2013	6,908,913	4,122,830	2,786,083	0.5967

Table 2. Estimated 2013 harvest in pounds and estimated reduction in 2013 harvest in pounds and percentage based on proportion of fish landed pre closure in 2006-2012 to pre closure landings in 2013.

Proportion	2013 Pre June 28th	Estimated Total 2013 harvest	Reduction From Estimated 2013 Harvest	% Reduction From 2013 Estimate
Min	4,122,830	9,416,275	2,507,362	26.63%
Max	4,122,830	10,424,540	3,515,627	33.72%
Mean	4,122,830	10,014,398	3,105,485	31.01%



MARYLAND - VIRGINIA
"Potomac River Compact of 1958"

Potomac River Fisheries Commission

222 Taylor Street
P.O. BOX 9

Colonial Beach, Virginia 22443

TELEPHONE: (804) 224-7148 · (800) 266-3904 · FAX: (804) 224-2712



Menhaden **2013 Annual Compliance Report** **April 1, 2014**

I. Request *de minimis*, where applicable – N/A

II. Previous calendar year's fishery

Open 2013 Season Harvesting Under Quota

The Potomac River Fisheries Commission's (PRFC) 2013 commercial allocation for Atlantic menhaden was determined by the ASMFC to be 0.62 percent of the coastwide quota, which was 1,049.69 MT (2,314,170 lbs), based on PRFC's historical landings (Table 1 in Appendix).

The 2013 Atlantic menhaden landings for the Potomac River were tracked by PRFC staff using the daily mandatory harvest reports submitted by the commercial fishermen on a weekly basis. A weekly menhaden harvest call-in program was imposed for pound net fishermen on July 21, 2013, when 70 percent of the quota (catch limit) was reached. PRFC historical records indicate that the pound net fishery has been responsible for about 99 percent of the menhaden landings (Table 2 in Appendix). The tracking process projected that 90 percent of the catch limit would be reached on August 22, 2013, and the catch limit was projected to be reached on September 10, 2013. Therefore all commercial fisheries on the Potomac River were closed to the harvest of Atlantic menhaden on August 22, 2013 (closure notices in appendix) and the menhaden landings through that date were 2,207,885 lbs. As the season progressed and late reports were received, a revised quota tracking graph (Figure 1 in Appendix) reflected the actual dates of when 90 percent of the catch was reached (August 17, 2013), the fishery was closed (August 22, 2013), and the quota was reached (August 27, 2013).

An ASMFC memorandum was sent out on November 7, 2013 regarding the allocation of Unused Episodic Events Set Aside for Atlantic menhaden. The PRFC was given an additional 23,334 lbs. of menhaden, resulting in a revised quota of 2,337,508 lbs. Consequently, the difference between the Potomac River menhaden landings through the closure date and the PRFC revised quota amounted to 129,623 lbs. Therefore we conclude that the PRFC did not exceed the 2013 quota established by the ASMFC.

2013 Bycatch Allowance

The 6,000 pound bycatch allowance for the pound net fishery went into effect on the Potomac River on August 23, 2013. Details regarding the restrictions are documented in the PRFC Order #2013-08 "Revised" (copy in appendix). Atlantic menhaden harvest by pound nets in the Potomac River from August 23 through December 15, 2013 totaled 1,087,400 lbs. All reported daily menhaden harvest by pound netters during that time was 6,000 lbs. or less per trip. There were in fact only two records of 6,000 lbs. harvests and they were reported in September.

Analysis of pound net trips harvesting menhaden under the bycatch allowance

1 – 1,000 lbs.	141 records of trips	67,980 lbs.
1,001 – 2,000 lbs	95 records of trips	140,750 lbs.
2,001 – 3,000 lbs.	68 records of trips	166,910 lbs.
3,001 – 4,000 lbs.	44 records of trips	157,055 lbs.
4,001 – 5,000 lbs.	61 records of trips	278,275 lbs.
5,001 – 6,000 lbs	51 records of trips	276,430 lbs.
6,001 +	0 records of trips	
	Total	1,087,400 lbs.

Episodic Event Set Aside - N/A

III. Mandatory Monitoring Programs

A. Summarize reporting programs –

Each commercial fisherman is required to file detailed daily harvest reports for each gear type used to harvest fish, and the reports are sent in weekly. The poundage of each species of fish harvested is recorded by date of catch. Other required fields include area fished and port or creek of landing. Discard/released information is recorded in pounds by species of fish by reason (i.e. no market, closed season, too small or too large). Effort data is recorded by day for hook & line (number of hooks used and hours fished), for pound or fyke nets (number fished each day), for gill nets, haul seines and trot line (yards fished), and fish, eel or bait pots (number fished each day). The fishermen also report to whom they sold their fish, but price information is optional.

B. Purse seine – N/A

C. Commercial Bait Harvest Samples – Age & Length Data

PRFC is required to collect one 10-fish sample (age and length) per 200 metric tons landed for bait purposes. In 2013, menhaden samples were obtained from pound nets on monthly basis from April through December. Results of the 2013 sample analyses are not yet available.

Potomac River Menhaden Age Composition						
Age	2010		2011		2012	
	# of fish	% at Age	# of fish	% at Age	# of fish	% at Age
1	15	56	29	49	10	11
2	7	26	19	32	78	87
3	2	7	2	3	2	2
4	3	11	6	10		
5			3	5		
Total	27	100	59	100	90	100

Analyses of menhaden were conducted by the NMFS at the Beaufort Lab in North Carolina.

- D. We collect mandatory catch and effort data for the pound net fishery which includes total pounds landed per day and number of pound nets fished per day (Table 3 in Appendix).

IV. Planned Management Programs for the current calendar year

- A. Effective March 17, 2014 – When the commercial fisheries for Atlantic menhaden are closed, PRFC pound net licensees are permitted to possess and/or land no more than 6,000 pounds of Atlantic menhaden for a single vessel per day, which must be harvested by the pound net licensee from his licensed pound net(s).
- B. Summarize significant changes to your monitoring programs – N/A

Appendix

Table 1

Potomac River Menhaden Harvest by Gear and Landings by State

Year	Pound Net	Gill Net	Haul Seine	Fyke Net	Misc.	Landed in		Total	
						MD	VA	(lbs.)	(mt)
1964					6,781,993	6,628	6,775,365	6,781,993	3,076.31
1965					7,235,827	41,363	7,194,464	7,235,827	3,282.17
1966					5,776,200	3,309	5,772,891	5,776,200	2,620.08
1967					2,955,967	67,350	2,888,617	2,955,967	1,340.83
1968					2,622,760	8,490	2,614,270	2,622,760	1,189.68
1969					2,098,808	13,904	2,084,904	2,098,808	952.02
1970					4,290,459	126,606	4,163,853	4,290,459	1,946.15
1971					3,542,921	146,813	3,396,108	3,542,921	1,607.07
1972					6,156,529	196,150	5,960,379	6,156,529	2,792.60
1973					11,162,850	428,146	10,734,704	11,162,850	5,063.47
1974					9,831,072	446,931	9,384,141	9,831,072	4,459.37
1975					10,542,082	623,011	9,919,071	10,542,082	4,781.89
1976	10,830,138	6,312	500		980,603	1,495,308	10,322,245	11,817,553	5,360.44
1977	18,356,820	6,595	3,900		1,601,789	1,987,066	17,982,038	19,969,104	9,057.99
1978	17,078,890	5,056	100		214,440	2,859,690	14,438,796	17,298,486	7,846.59
1979	13,886,417	7,643	21,005		521,739	2,302,895	12,133,909	14,436,804	6,548.53
1980	18,716,443	4,944				3,272,842	15,448,545	18,721,387	8,492.02
1981	20,359,817	7,048				4,150,488	16,216,377	20,366,865	9,238.41
1982	17,988,067	1,367				3,764,705	14,224,729	17,989,434	8,160.01
1983	20,820,224	721				2,857,187	17,963,758	20,820,945	9,444.38
1984	13,111,057	840	9,700			3,244,254	9,877,343	13,121,597	5,951.96
1985	16,768,303	586				3,213,502	13,555,387	16,768,889	7,606.37
1986	10,946,547	25,426				2,548,105	8,423,868	10,971,973	4,976.89
1987	13,119,905	590		203		3,381,526	9,739,172	13,120,698	5,951.55
1988	13,231,030	338				4,342,213	8,889,155	13,231,368	6,001.75
1989	8,333,994		180			2,072,144	6,262,030	8,334,174	3,780.38
1990	4,523,776					903,355	3,620,421	4,523,776	2,051.98
1991	5,376,223			41		1,361,026	4,015,238	5,376,264	2,438.67
1992	5,061,295	270				732,886	4,328,679	5,061,565	2,295.93
1993	7,868,456	5	15,540			1,233,258	6,650,743	7,884,001	3,576.18
1994	6,680,785	26		126		1,179,623	5,501,314	6,680,937	3,030.47
1995	7,002,818					1,671,619	5,331,199	7,002,818	3,176.48

PRFC
 2013 Annual Report for Menhaden
 April 1, 2014

Table 1 continued

Potomac River Menhaden Harvest by Gear and Landings by State

Year	Pound Net	Gill Net	Haul Seine	Fyke Net	Misc.	Landed in		Total	
						MD	VA	(lbs.)	(mt)
1996	5,111,370			53		1,844,756	3,266,667	5,111,423	2,318.54
1997	5,757,060	70	22	218		1,715,759	4,041,611	5,757,370	2,611.54
1998	3,956,806	3,029	20,683	220		1,117,865	2,862,873	3,980,738	1,805.66
1999	4,855,463	2,489	1,380	1,551		1,372,713	3,488,170	4,860,883	2,204.90
2000	5,006,982	10,275	4,020	2,097		934,364	4,089,010	5,023,374	2,278.60
2001	3,320,627		416	7,992		699,016	2,630,019	3,329,035	1,510.05
2002	3,113,585	1,145	2,687	4,633		804,480	2,317,570	3,122,050	1,416.16
2003	2,415,194		774	22,822		1,017,965	1,420,825	2,438,790	1,106.24
2004	5,398,476		112	12,455		1,752,941	3,658,102	5,411,043	2,454.45
2005	4,752,541		260	7,104		2,701,830	2,058,075	4,759,905	2,159.09
2006	3,410,520		210	2,787		1,573,249	1,840,268	3,413,517	1,548.37
2007	5,031,881	2,930	371	1,724		2,215,826	2,821,080	5,036,906	2,284.74
2008	4,814,441	990	4,088	1,126		1,630,870	3,189,775	4,820,645	2,186.64
2009	3,183,688	7610	596	11		1,794,124	1,397,781	3,191,905	1,447.85
2010	2,781,589	1203	4,835	2,791	310	754,191	2,036,537	2,790,728	1,265.87
2011	2,751,283	3360	3,645	1,309		1,295,893	1,463,704	2,759,597	1,251.75
2012	5,852,421	15,460	22,240	2,089	18	2,656,233	3,235,995	5,892,228	2,672.71
2013	3,290,922		4,373			1,382,582	1,912,713	3,295,295	1,494.72

2013 Open Season Harvest	PRFC Revised Quota	2013 PN Bycatch Harvest
2,207,885 lbs.	2,337,508 lbs.	1,087,400 lbs.
Jan. 1 – Aug. 22, 2013	2013	Aug. 23 – Dec. 15, 2013

Table 2

Potomac River Commercial Menhaden Harvest

Harvest in Pounds and Metric Tons, with Percent of Harvest by Pound Nets

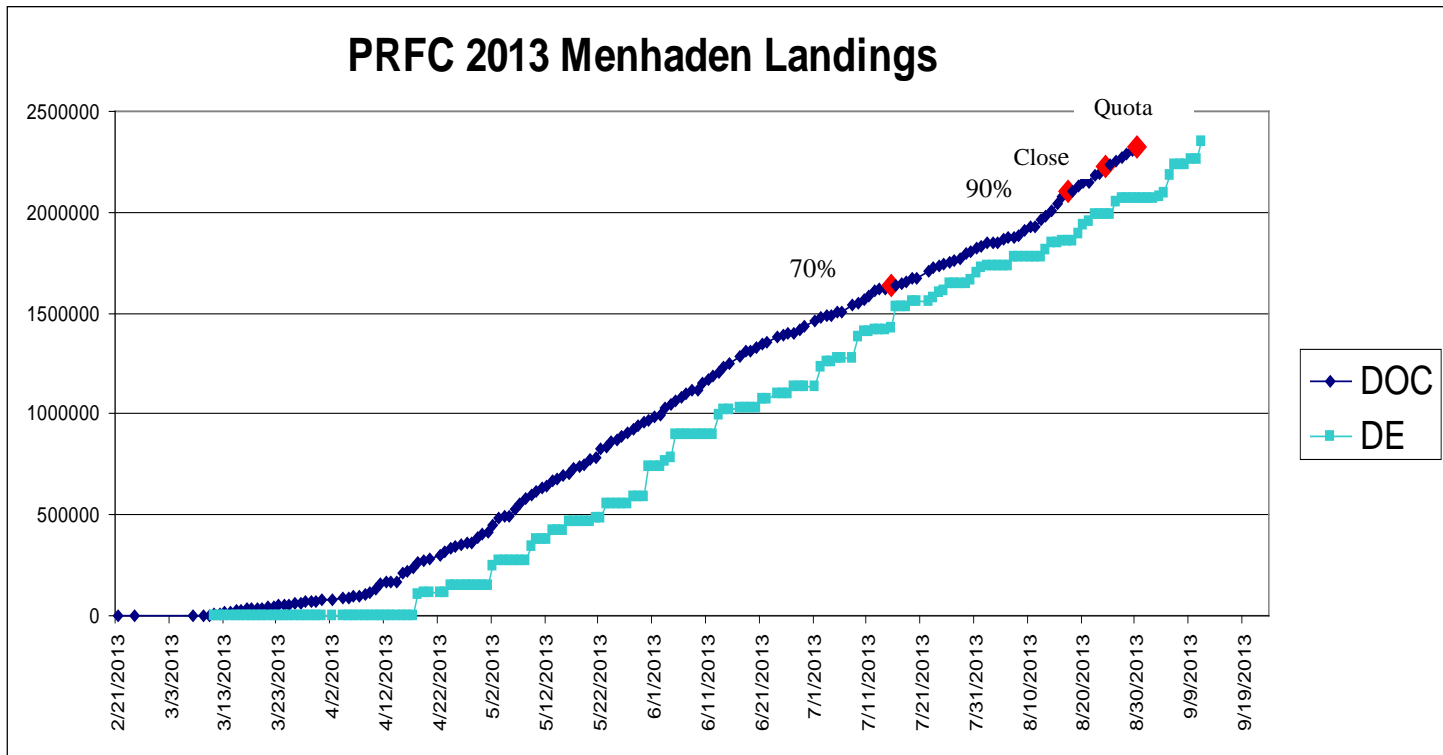
Year	Total Pounds	Total MT	% by PN	Year	Total Pounds	Total MT	% by PN
1964	6,781,993	3,076.3		1989	8,334,174	3,780.3	100.0%
1965	7,235,827	3,282.1		1990	4,523,776	2,052.0	100.0%
1966	5,776,200	2,620.0		1991	5,376,264	2,438.6	100.0%
1967	2,955,967	1,340.8		1992	5,061,565	2,295.9	100.0%
1968	2,622,760	1,189.7		1993	7,884,001	3,576.1	99.8%
1969	2,098,808	952.0		1994	6,680,937	3,030.4	100.0%
1970	4,290,459	1,946.1		1995	7,002,818	3,176.4	100.0%
1971	3,542,921	1,607.0		1996	5,111,423	2,318.5	100.0%
1972	6,156,529	2,792.6		1997	5,757,370	2,611.5	100.0%
1973	11,162,850	5,063.4		1998	3,980,738	1,805.6	99.4%
1974	9,831,072	4,459.3		1999	4,860,883	2,204.9	99.9%
1975	10,542,082	4,781.8		2000	5,023,374	2,278.6	99.7%
1976	11,817,553	5,360.4	91.6%	2001	3,329,035	1,510.0	99.7%
1977	19,969,104	9,057.8	91.9%	2002	3,122,050	1,416.1	99.7%
1978	17,298,486	7,846.5	98.7%	2003	2,438,790	1,106.2	99.0%
1979	14,436,804	6,548.4	96.2%	2004	5,411,043	2,454.4	99.8%
1980	18,721,387	8,491.9	100.0%	2005	4,759,905	2,159.1	99.8%
1981	20,366,865	9,238.3	100.0%	2006	3,413,517	1,548.3	99.9%
1982	17,989,434	8,159.9	100.0%	2007	5,036,906	2,284.7	99.9%
1983	20,820,945	9,444.2	100.0%	2008	4,820,645	2,186.6	99.9%
1984	13,121,597	5,951.9	99.9%	2009	3,191,905	1,447.8	99.7%
1985	16,768,889	7,606.2	100.0%	2010	2,790,728	1,265.9	99.7%
1986	10,971,973	4,976.8	99.8%	2011	2,759,597	1,251.7	99.7%
1987	13,120,698	5,951.5	100.0%	2012	5,892,228	2,672.7	99.3%
1988	13,231,368	6,001.7	100.0%	2013	3,295,295	1,494.7	99.9%

Table 3

Potomac River Pound Net Licenses, Effort Data and CPUE (lbs/net-days fished)

Year	Number of			Year	Number of:		
	Licenses	PN net-days fished	CPUE		Licenses	PN net-days fished	CPUE
1964	138			1990	86	4,585	987
1965	144			1991	85	4,683	1,148
1966	157			1992	76	3,848	1,315
1967	149			1993	72	4,601	1,710
1968	136			1994	99	4,389	1,525
1969	181			1995	100	4,553	1,538
1970	112			1996	100	3,483	1,468
1971	99			1997	100	3,975	1,448
1972	85			1998	100	3,456	1,145
1973	81			1999	100	2,986	1,626
1974	69			2000	100	2,713	1,846
1975	93			2001	100	2,599	1,278
1976	119	4,668	2,320	2002	100	2,778	1,121
1977	134	5,254	3,494	2003	100	2,288	1,056
1978	119	5,046	3,385	2004	100	2,448	2,205
1979	134	5,620	2,471	2005	100	2,538	1,873
1980	127	5,914	3,165	2006	100	2,075	1,644
1981	123			2007	100	1,985	2,535
1982	114			2008	100	1,819	2,647
1983	119			2009	100	1,585	2,009
1984	124			2010	100	1,218	2,284
1985	144			2011	100	1,101	2,499
1986	130			2012	100	1,989	2,942
1987	84			2013	100	1,507	2,184
1988	93	5,367	2,465				
1989	96	4,924	1,693				

Figure 1



◆ 70% of catch limit reached on 7/15/2013, 90% of catch limit reached on 8/17/2013, and 100% reached on 8/27/2013

7/21/2013 70% of catch limit reached, so weekly call-in program started for pound netters

8/22/2013 All fisheries closed to the harvest of menhaden and the 6,000 lbs. daily bycatch allowance for PN in effect

Harvest Reports indicated that on Aug. 27, 2013 the catch limit of 2,314,170 lbs. was reached using Date of Catch (DOC); whereas the Date Entered (DE – when reports were received and entered in computer) realized the catch limit on Sept. 11, 2013. The difference between the DOC on Aug. 22 (all fisheries closed) and the DOC on Aug. 27 (Catch Limit reached) was 106,285 lbs; consequently the PRFC did not exceed the catch limit established by the ASMFC for the Potomac River.

Potomac River Fisheries Commission

O R D E R #2013-08 “Revised”

COMMERCIAL ATLANTIC MENHADEN CATCH LIMITS AND RESTRICTIONS

THE POTOMAC RIVER FISHERIES COMMISSION, having found it necessary to comply with certain provisions of the Atlantic States Marine Fisheries Commission (ASMFC) Amendment 2 to the Interstate Fishery Management Plan (IFMP) for Atlantic Menhaden and the provisions of Regulation I, Section 7(a)(2):

HEREBY DECLARES AND ORDERS: the catch limit for Atlantic menhaden provided for in Regulation III, Section 10(a) shall be 2,314,170 pounds. A weekly menhaden harvest call-in program will be imposed when 70 percent of the catch limit is projected to be landed. When the PRFC Atlantic menhaden catch limit is reached, all commercial fisheries shall be closed to all gear types.

BE IT FURTHER DECLARED AND ORDERED: When the commercial fisheries for Atlantic menhaden are closed, subject to the provisions of the ASMFC Amendment 2 to the IFMP for Atlantic Menhaden, PRFC pound net licensees are permitted to possess and/or land no more than 6,000 pounds of Atlantic menhaden for a single vessel per day, which must be harvested by the pound net licensee from his licensed pound net(s). Exception – a single vessel may land/possess no more than 12,000 pounds of Atlantic menhaden per day when there are two PRFC pound net licensees physically on board who each have at least one of their pound nets set and fishing and prior to the fishery being closed and the by-catch provisions being implemented, and no more than 6,000 pounds of Atlantic menhaden are harvested from either of the licensees nets.

AND IT IS FURTHER DECLARED AND ORDERED: this Order #2013-08 “Revised” shall become effective June 16, 2013, shall supersede and repeal Order #2013-08, and remain in effect until March 18, 2014.

This Order was duly adopted by the Potomac River Fisheries Commission on June 6, 2013.



MARYLAND - VIRGINIA
"Potomac River Compact of 1958"

Potomac River Fisheries Commission

222 Taylor Street

P.O. BOX 9

Colonial Beach, Virginia 22443

TELEPHONE: (804) 224-7148 · (800) 266-3904 · FAX: (804) 224-2712

www.prfc.us prfc@verizon.net



Memorandum

To: PRFC Finfish Fishermen
From: Ellen B. Cosby, Assistant Executive Secretary
Date: April 15, 2014
Re: Menhaden Fisheries to close on Aug. 22, 2013

In the ASMFC Amendment 2 to the Interstate Fishery Management Plan for Atlantic Menhaden, a catch limit/quota of 2,314,170 pounds has been allocated to the PRFC for 2013. Any overage of the 2013 catch limit will be deducted from the 2014 catch limit, therefore all menhaden fisheries will be closed when the catch limit is projected to be met. Current projections indicate that 90 percent of the catch limit will be reached during the week of August 19, 2013.

The Potomac River Fisheries Commission is announcing the closure of all menhaden fisheries in the Potomac River, effective midnight on August 22, 2013.

The ASMFC mandates that all commercial fisheries be closed for the harvest of menhaden when the catch limit is met; consequently no commercial fishing gear (except pound nets) shall harvest any menhaden for the remainder of 2013.

As described in the ASMFC Amendment 2 of the Atlantic Menhaden IFMP, a 6,000 pound daily bycatch limit per licensee per vessel will become effective for pound netters in the Potomac River.

Contact Ellen Cosby if you have any questions regarding this menhaden closure at (804) 224-7148 or 1-800-266-3904.



MARYLAND - VIRGINIA
"Potomac River Compact of 1958"

Potomac River Fisheries Commission

222 Taylor Street
P.O. BOX 9

Colonial Beach, Virginia 22443

TELEPHONE: (804) 224-7148 · (800) 266-3904 · FAX: (804) 224-2712

www.prfc.us prfc@verizon.net



Memorandum

To: PRFC Pound Net Fishermen
From: Ellen B. Cosby, Assistant Executive Secretary
Date: April 15, 2014
Re: Menhaden Pound Net Fisheries to close on Aug. 22, 2013

In the ASMFC Amendment 2 to the Interstate Fishery Management Plan for Atlantic Menhaden, a catch limit/quota of 2,314,170 pounds has been allocated to the PRFC for 2013. Any overage of the 2013 catch limit will be deducted from the 2014 catch limit, therefore all menhaden fisheries will be closed when the catch limit is projected to be met. Current projections indicate that 90 percent of the catch limit will be reached during the week of August 19, 2013.

The Potomac River Fisheries Commission is announcing the closure of all menhaden fisheries in the Potomac River, effective midnight on August 22, 2013. As described in the ASMFC Amendment 2 of the Atlantic Menhaden IFMP, a 6,000 pound daily bycatch limit per licensee per vessel will become effective for pound netters in the Potomac River. The ASMFC mandates that all other commercial fisheries will be closed for the harvest of menhaden; consequently no commercial fishing gear (except pound nets) shall harvest any menhaden for the remainder of 2013.

Contact Ellen Cosby if you have any questions regarding this menhaden closure at (804) 224-7148 or 1-800-266-3904.

**ATLANTIC MENHADEN COMPLIANCE REPORT
For VIRGINIA**

A Report to the Atlantic States Marine Fisheries Commission

April 1, 2014

Joseph D. Grist
Fisheries Management Division
Virginia Marine Resources Commission
2600 Washington Avenue
Newport News, VA 23607

I. Request for *de minimus*.

The Commonwealth of Virginia does not request *de minimus* status.

II. Previous calendar year's fishery

1. Directed Fishery

a. Commercial landings by year and major gear type are provided in a separate Excel spreadsheet as required by ASMFC (Spreadsheet Tab 1). The 2013 commercial landings of Atlantic menhaden, in the Commonwealth of Virginia, totaled 316,103,448 pounds (2013 total landings data are preliminary).

b. Based on projections from landing reports, individual mandatory harvest reports and Virginia seafood buyer reports, the Commonwealth of Virginia's commercial menhaden gill net fishery was closed on June 10, 2013, (Attachment A-1) and the commercial menhaden haul seine fishery was closed on July 5, 2013 (Attachment A-2).

c. The Commonwealth of Virginia did not participate in a quota transfer.

2. By-catch Fishery

a. Trip level bycatch landings, by gear type, are provided in a separate Excel spreadsheet as required by ASMFC (Spreadsheet Tab 2A). The 2013 commercial bycatch landings of Atlantic menhaden, in the Commonwealth of Virginia, totaled 251,191 pounds.

b. Analysis of bycatch trips, by gear type, are provided in a separate Excel spreadsheet as required by ASMFC (Spreadsheet Tab 2B).

3. Episodic Event Set Aside

a. The Commonwealth of Virginia did not participate in the episodic event set aside.

III. Mandatory Monitoring Programs

a. Registered commercial fishermen are required to provide a monthly harvest report and daily harvest records that include the name and signature of the registered commercial fisherman and his commercial fisherman's registration license number; any buyer or private sale information; the date of any harvest; the city or county of landing that harvest; the water body fished, gear type, and amount of gear used for that harvest; the number of hours any gear was fished and the number of hours the registered commercial fisherman fished; the number of crew on board, including captain; species harvested; market category; live weight or processed weight of species harvested; and vessel identification (Coast Guard documentation number, Virginia license number, or hull/VIN number).

Each licensee of any purse seine vessel that harvests menhaden must submit a Captain's Daily Fishing Report to the Commission on each non-weekend or non-holiday day that either purse seine sector is open for harvest. The Captain's Daily Fishing report is produced by the National Marine Fisheries Service and provides preliminary estimates of harvest. Pursuant to § 28.2-204 of the Code of Virginia those same licensees must submit, to the Commission, actual weekly harvest reports that include vessel name and exact weight of menhaden landed, in pounds, by Wednesday of the following week. Once ninety-seven percent of either purse seine sector's quota is projected and announced to have been met, each licensee of that purse seine sector must provide daily harvest totals to the Commission's interactive voice recording system.

b. Provided in Section III.a.

c. Age and length data from the commercial bait harvest (non snapper-rig) are provided in a separate Excel spreadsheet as required by ASMFC (Spreadsheet Tab 3C). Age and length data from the commercial snapper-rig bait industry can be attained from NMFS.

d. Total pounds landed per day, by pound nets, and number of pounds nets fished, per day, are mandatory catch and effort data elements as described in Section III.a.

IV. Planned management programs for the current calendar year

a. No changes were implemented by the Commonwealth of Virginia that would deviate from the requirements of Amendment 2 to the Atlantic Menhaden Fishery Management Plan.

b. No changes to the Commonwealth of Virginia's monitoring program are planned for 2014. The ASMFC Atlantic Menhaden Technical reviewed the Commonwealth's state fishery independent survey during the January 2014 data workshop.

V. Law Enforcement Reporting Requirements

No law enforcement issues occurred during the previous calendar year.



COMMONWEALTH of VIRGINIA

*Marine Resources Commission
2600 Washington Avenue
Third Floor
Newport News, Virginia 23607*

Douglas W. Domenech
Secretary of Natural Resources

Jack G. Travelstead
Commissioner

June 5, 2013

TO: ATLANTIC MENHADEN BUYERS AND HARVESTERS
FROM: VIRGINIA MARINE RESOURCES COMMISSION
RE: CLOSURE OF THE DIRECTED MENHADEN GILL NET FISHERY

Effective 6:00 P.M., Eastern Daylight Time (EDT), Monday, June 10, 2013, the commercial menhaden gill net fishery will close. Based on landing reports from mandatory harvest reporting and Virginia seafood buyers, it is projected that Virginia will have caught 100% of the 1,521,108 pounds of the menhaden gill net quota, by the above date and time.

As provided in Chapter 4 VAC20-1270-10 et seq. "Pertaining to Atlantic Menhaden", when a non-purse seine menhaden bait sector gear quota is announced, by the Commissioner, as having been attained, individuals using that specific gear type may land no more than 6,000 pounds of menhaden per day, as bycatch. All bycatch landings of menhaden must be reported according to the schedule and reporting requirements established by Chapter 4 VAC 20-610-10 et seq., "Pertaining to Commercial Fishing and Mandatory Harvest Reporting".

Therefore, after 6:00 P.M., EDT, June 10, 2013 it shall be unlawful for any person to harvest or land more than 6,000 pounds of menhaden per day, for commercial purposes, by use of gill net in Virginia, for the remainder of 2013.

If you have questions or comments contact Joe Cimino at (757) 247-2237 or Joe Grist at (757) 247-2236.

JC(PS):jc

An Agency of the Natural Resources Secretariat

www.mrc.virginia.gov

Telephone (757) 247-2200 (757) 247-2292 V/TDD Information and Emergency Hotline 1-800-541-4646 V/TDD



COMMONWEALTH of VIRGINIA

*Marine Resources Commission
2600 Washington Avenue
Third Floor
Newport News, Virginia 23607*

Douglas W. Domenech
Secretary of Natural Resources

Jack G. Travelstead
Commissioner

July 5, 2013

TO: ATLANTIC MENHADEN BUYERS AND HARVESTERS

FROM: VIRGINIA MARINE RESOURCES COMMISSION

RE: CLOSURE OF THE DIRECTED MENHADEN HAUL SEINE FISHERY

Effective 6:00 P.M., Eastern Daylight Time (EDT), Friday, July 5, 2013, the commercial menhaden haul seine fishery will close. Based on landing reports from mandatory harvest reporting and Virginia seafood buyers, it is project that Virginia will have caught 100% of the 20,103 pounds of the menhaden haul seine quota, by the above date and time.

As provided in Chapter 4VAC20-1270-10 et seq. "Pertaining to Atlantic Menhaden", when a non-purse seine menhaden bait sector gear quota is announced, by the Commissioner, as having been attained, individuals using that specific gear type may land no more than 6,000 pounds of menhaden per day, as bycatch. All bycatch landings of menhaden must be reported according to the schedule and reporting requirements established by Chapter 4VAC20-610-10 et seq., "Pertaining to Commercial Fishing and Mandatory Harvest Reporting".

Therefore, after 6:00 P.M., EDT, Friday, July 5, 2013 it shall be unlawful for any person to harvest or land more than 6,000 pounds of menhaden per day, for commercial purposes, by use of a haul seine in Virginia, for the remainder of 2013.

If you have any questions or comments contact Joe Cimino at (757) 247-2237 or Joe Grist at (757) 247-2236.

FM:jg

An Agency of the Natural Resources Secretariat

www.mrc.virginia.gov

Telephone (757) 247-2200 (757) 247-2292 V/TDD Information and Emergency Hotline 1-800-541-4646 V/TDD

NORTH CAROLINA REPORT FOR THE ATLANTIC MENHADEN PLAN REVIEW TEAM

April 1, 2014

Introduction

The North Carolina menhaden fishery consisted of several seafood dealers that recorded menhaden bait landings for 2013. A total of 406,448 lbs. of menhaden was landed in North Carolina in 2012. Menhaden landings are down from 524,131 lbs. and 3,529,967 lbs. in 2012 and 2011, respectively, because of the inability of the fly net fishery and the flounder trawl fishery to land in North Carolina because of excessive shoaling in Oregon Inlet. There were no changes in either the independent monitoring or the collection of commercial fisheries landing data by the North Carolina Division of Marine Fisheries (DMF).

The North Carolina General Assembly passed Session Law 2012-190 that permanently eliminates purse seine vessels deployed by a mothership for the harvest of menhaden within three miles of the ocean shoreline along from Virginia to South Carolina beginning January 1, 2013.

2013 Fishery and Management Program

Activity and Results of Fishery Dependent Monitoring

There are several fishery dependent monitoring programs that sample Atlantic menhaden (DMF program numbers shown in parentheses). These programs are the sink net fishery (434), the winter trawl fishery (433), the estuarine gill net fishery (461) and the sciaenid pound net fishery (431). However, no menhaden data have been analyzed. The DMF monitors the commercial landings of Atlantic menhaden through the commercial statistics trip ticket program. There were 406,448 lbs. of menhaden landed in North Carolina for 2013. These landings are from the bait fishery and are reported below (Table 1).

Table 1. NC Bait Landings of Menhaden for 2013

Month	Pounds
January	16,040
February	27,005
March	79,392
April	52,788
May	20,610
June	18,107
July	24,129
August	23,190
September	59,052
October	34,458
November	18,504
December	33,174*
Total	406,448

*These numbers are subject to change.

Amendment 2 requires NC to collect one 10-fish sample (age and length) per 200 metric tons landed for bait purposes. In 2013, 185 age and length data samples were collected by gear type for the NC menhaden commercial bait harvest.

Activity and Results of Fishery Independent Monitoring

There are several independent monitoring programs that are conducted by the DMF. These are the estuarine trawl survey, conducted in May and June at 105 fixed stations statewide; the Pamlico Sound trawl survey conducted in June and September at 50-52 random grid locations in Pamlico Sound and Pamlico and Neuse rivers; the striped bass nursery trawl survey in Albemarle Sound, conducted in July through October with ~19 fixed stations and the Alosid seine survey in Albemarle Sound, which samples in June through October with ~31 fixed stations.

The Estuarine Trawl Survey (120)

The estuarine trawl survey is conducted during May and June in primary nursery areas throughout the state. One two-seam otter trawl with a 3.2 m headrope, 6.4 mm bar mesh wings and body, and a 3.2 mm bar mesh cod end, with a 1.8 m bridle and 0.46 m by 0.76 m doors is towed for one minute by a small outboard boat at approximately 69 m per minute. Boat towing speeds are calibrated prior to each sampling season. All species are identified and counted. All economically important species including menhaden are counted and a random subsample of 30-60 individuals of each size group is measured to the nearest mm. The remaining species are identified and counted. The bottom type, depth, bottom and surface temperature, salinity and dissolved oxygen are recorded at each station. The presence of submerged aquatic vegetation is also noted and the species

of grasses identified. Results from 2004 to 2013 are presented in Table 2. Analysis results may differ from previous compliance reports because size ranges defining juveniles were changed from <70 mm to <90 mm for samples taken during the month of May and from <100 mm to <110 mm for the month of June.

Table 2. Atlantic Menhaden Catch Per Unit Effort, Standard Error, Geometric Mean and Geometric Mean Standard Error from NC Estuarine Trawl Survey (2004-2013)

YEAR	N	CPUE	SE	GEO MEAN	GEO SE
2004	208	17.2067	3.4863	2.379	0.41201
2005	208	45.5962	20.5187	3.750	0.41762
2006	208	2.67633	0.6983	0.654	0.39275
2007	208	11.9519	5.9459	1.079	0.40120
2008	208	7.8365	1.3835	1.542	0.40403
2009	208	6.7067	2.1191	1.003	0.40000
2010	208	24.0673	7.8587	2.359	0.41236
2011	208	12.3317	2.1974	1.927	0.40968
2012	208	1.5048	0.4053	0.372	0.38825
2013	208	10.8894	2.1196	1.876	0.40667

Pamlico Sound Survey (195)

The Pamlico Sound survey is conducted aboard the R/V Carolina Coast, a 13.4 m double-rigged trawler, during the first three weeks in June and September. Two 9.1 meter mongoose trawls with 60.9 cm by 71.1 cm doors, 22.2 mm bar mesh body, and 19.1 mm bar mesh cod ends are towed for 20 minutes (2.5 knots) at 50 to 53 randomly selected one minute grids. There are seven strata based on depth located in the Neuse, Pungo, and Pamlico rivers, Pamlico Sound west (shallow (<3.7 m) and deep (\geq 3.7 m)) and Pamlico Sound east (shallow and deep). Each stratum has no less than three stations. Menhaden captured in this trawl survey are counted, weighed, and measured. Results from 2004 to 2013 are presented in Table 3. Analysis results may differ from previous compliance reports because size ranges defining juveniles were changed from <110 mm to <150 mm for the month of September.

Table 3. Atlantic Menhaden Catch Per Unit Effort, Standard Error, Geometric Mean and Geometric Mean Standard Error from NC Pamlico Sound Trawl Survey (2004-2013).

YEAR	N	CPUE	SE	GEO MEAN	GEO SE
2004	101	9.96	3.37	0.59	0.39852
2005	98	1.70	0.72	0.30	0.39852
2006	102	0.32	0.12	0.11	0.37908
2007	99	1.02	0.57	0.10	0.38289
2008	102	35.43	22.24	0.43	0.39852
2009	102	2.74	1.50	0.24	0.39455
2010	102	25.02	8.89	0.89	0.41066
2011	102	0.47	0.21	0.15	0.38289
2012	102	3.46	1.59	0.27	0.39455
2013	102	7.36	6.99	0.15	0.38289

Striped Bass Nursery Trawl Survey (Albemarle Sound) (100)

Bi-weekly trawl samples are conducted at seven established locations in the western Albemarle Sound area and 12 established locations in the central Albemarle Sound area from mid-July through October. These stations are sampled once every two weeks with a 5.5 m semi-balloon trawl with a body mesh size 19.0 mm bar mesh, and a 6.4 bar mm mesh tail bag towed for 15 minutes. Additional historical stations were added in 2004 in order to provide additional data for other species. Samples were sorted by species, counted and measured. Water temperature, salinity, depth and bottom type were noted for each sample. Results from 2004 to 2013 are presented in Table 4. Analysis results may differ from previous compliance reports because size ranges defining juveniles were changed to include juveniles <90mm in May, <110 mm in June, <125 mm in July and August, and <150 mm in September and October.

Table 4. Atlantic Menhaden Catch Per Unit Effort, Standard Error, Geometric Mean and Geometric Mean Standard Error from Striped Bass Nursery Trawl Survey (2004-2013).

YEAR	N	CPUE	SE	GEO MEAN	GEO SE
2004	346	0.61272	0.23631	0.18900	0.37796
2005	304	6.67105	1.36297	0.81076	0.39486
2006	356	1.28090	0.55950	0.16814	0.37952
2007	359	0.57382	0.21960	0.17728	0.37732
2008	359	7.89136	4.51306	0.42184	0.38645
2009	359	3.50139	2.24618	0.40638	0.38310
2010	358	0.48324	0.14821	0.15128	0.37717
2011	359	4.06685	0.88027	0.55918	0.38831
2012	359	1.28412	0.45546	0.19058	0.38061
2013	360	9.08333	2.92709	1.01846	0.39364

Anadromous Seine Survey (Albemarle Sound) (100)

Eleven seine stations are sampled monthly using a 18.3 m bag seine with a 6.35 mm bar mesh in the body and 3.18 mm bar mesh in the bag during June - October, for juvenile alosids in Albemarle Sound. During September, an additional 13 stations are sampled throughout the Albemarle Sound area to determine distribution and annual variations in the nursery area. Additional historical stations were added in 2004 in order to provide additional data for other species.

Samples are sorted to species and 30 randomly selected individuals of each alosid species present are measured (mm, FL). If less than 30 are present, then all are measured. Results from 2004 to 2013 are presented in Table 5. Analysis results may differ from previous compliance reports because size ranges defining juveniles were changed to include juveniles <90mm in May, <110 mm in June, <125 mm in July and August, and <150 mm in September and October.

Table 5. Atlantic Menhaden Catch Per Unit Effort, Standard Error, Geometric Mean and Geometric Mean Standard Error from Anadromous Seine Survey (2004-2013)

YEAR	N	CPUE	SE	GEO MEAN	GEO SE
2004	176	5.369	5.2560	0.03214	0.38384
2005	163	19.896	10.7152	0.51239	0.40586
2006	185	0.043	0.0240	0.02397	0.37209
2007	185	24.465	12.8644	0.36986	0.40238
2008	211	11.668	8.7997	0.23073	0.39113
2009	197	13.660	9.3851	0.34433	0.39496
2010	194	13.814	9.5527	0.13713	0.38972
2011	184	104.777	90.7839	0.49317	0.40554
2012	192	3.302	2.2595	0.19720	0.38740
2013	186	151.446	49.8608	1.98049	0.43040

Regulations in Effect in 2013

The North Carolina General Assembly ratified a bill on July 16, 2012 that makes it unlawful to take menhaden or Atlantic thread herring with a purse seine net deployed by a mother ship and one or more runner boats in coastal fishing waters. This law went into effect January 1, 2013 and therefore eliminates the reduction fishery and any bait fishery that fishes purse seines with one or more runner boats from a mothership in estuarine and coastal fishing waters out to three miles.

Session Law 2007-320 that made it unlawful to take menhaden or Atlantic thread herring with a purse seine net within three nautical miles of the shoreline of Brunswick County from May 1 through October 31 of each year was repealed.

Menhaden commercial harvest by gear for 2013

Table 6. Commercial Landings by Gear for 2013 *Confidential data (<3 dealers reporting) [Removed because of confidential data]

Table 7. Commercial Landings 2004-2013

Year	Landings
2004	50,577,983
2005	13,386,245
2006	962,648
2007	1,134,167
2008	645,231
2009	2,124,733
2010	1,299,130
2011	3,529,967
2012	524,131
2013	406,448

Recreational and non-harvest losses for 2013

Data are not available.

Planned Management Programs for 2014

North Carolina Division of Marine Fisheries began implementing Amendment 2 of the ASMFC Interstate FMP for Atlantic Menhaden in January 1, 2013. As required in Amendment 2, DMF is monitoring the quota allocation of 0.49 percent of the allocated TAC.

Commercial Fishery Management Measures

Proclamation authority of the director is the mechanism available to close the bait fishery within 48 hours of issuance of any proclamation once NC is close to reaching its TAC. After NC reaches its TAC, the fishery will be limited to a 6,000 lb. bycatch limit per trip per day.

Monitoring Requirements

Landings will be monitored through the DMF trip ticket program. This program is a dealer based reporting system that has been in place since 1994. Dealers are required to submit monthly trip tickets to the Division. Biological sampling of Atlantic menhaden in the gill net, pound net and trawl fisheries will be monitored with lengths and ages collected from these gears.

De minimis

North Carolina is not eligible for *de minimis* based on 2010 and 2011 landings. However with low landings being reported for 201, North Carolina will consider a *de minimis* request should 2014 landings be similar to 2013.

Law Enforcement Reporting Requirements

There is no law enforcement reporting requirements for Atlantic menhaden.

**South Carolina Compliance Report to the ASMFC for the
Interstate Fishery Management Plan for Atlantic
Menhaden for the Year 2013**



April 1, 2014

Prepared by:
Joseph C. Ballenger, Ph.D.

Marine Resources Division
South Carolina Department of Natural Resources

I. **Introduction**

There have been no changes to the laws governing the harvest of menhaden in South Carolina state waters. Purse seines, which are the primary gear used to commercially harvest menhaden, remain prohibited in state waters. South Carolina also lacks any industrial processing capability for menhaden reduction so the probability of increased landings is low.

The primary harvest of menhaden in South Carolina waters is by cast net as bait in recreational fisheries. Although we have not conducted any studies to determine the magnitude of the cast net bait harvest, the consensus among knowledgeable biologists and fishermen is that the bait harvest is relatively stable and has minimal impact on local or regional stocks.

II. **Request for *de minimis***

South Carolina has requested (and continues to do so) and received *de minimis* status in prior years, and we have not had any recorded commercial landings of menhaden since 1997. We believe that the cast net bait fishery accounts for an insignificant proportion of the regional annual harvest. Annual bait landings remain less than 1% of the total coastwide bait landings for the most recent two years.

III. **Previous calendar year's fishery**

a. **Directed Fishery**

i. **Commercial landings**

Please find attached a record of South Carolina commercial landings by year and major gear type for the entire landings time series. There were no reported commercial landings of menhaden in 2013. The last year of reported commercial landings in South Carolina waters was 1997.

There has only been a total of 1,470 pounds of menhaden landed commercially since 1992; 1,300 in 1992 as incidental take by commercial shrimp trawlers and 170 pounds by a short-lived, directed cast net fishery in 1997.

South Carolina currently has no commercial menhaden fishery and is unlikely to develop one in the foreseeable future.

ii. **Closure Date**

Not applicable

iii. Quota Transfer

South Carolina did not participate in a quota transfer during 2013.

b. Bycatch Fishery

i. Bycatch Landings

South Carolina has no reported bycatch landings in 2013 or any other year.

ii. Bycatch Allowance Analysis

Not applicable

c. Episodic Event Set Aside

South Carolina did not have any episodic event landings during the 2013 fishing year.

IV. Mandatory Monitoring Programs

a. Reporting Programs

i. Fishery-Dependent Monitoring

South Carolina, in partnership with the NMFS, has a cooperative statistics program. We collect commercial landings through mandatory reports from wholesale seafood dealers. These reports, which dealers are required to submit monthly, include quantities and values by species, gear and capture area. South Carolina is also a participant in the ACCSP. As part of our statistical collection activities, port agents regularly visit commercial docks for collection of length frequency and bio-profile samples from a variety of species. Given the level of statistical collection activity, we would note any future commercial landings of menhaden.

ii. Fishery-Independent Monitoring

South Carolina currently has no fishery independent monitoring program directed at Atlantic menhaden assessment. The SEAMAP-SA coastal trawl program collects some menhaden as part of its coastal ocean sampling in the South Atlantic Bight. This information is available by area and season. In addition, our inshore fishery section has two fishery-independent monitoring programs, namely an electrofishing survey and a trammel net survey, that encounter menhaden periodically. Each of these surveys have been considered by the ASMFC Atlantic menhaden technical committee for use as a fishery-independent relative abundance index.

An additional data source regarding relative abundance of menhaden in South Carolina estuaries exists in the form of a historical crustacean trawl survey conducted in the 1950s and 1960s. While this trawl survey has continued since, it wasn't until 2010 that

information on finfish was once again recorded. At this time the frequency and volume of Atlantic menhaden has not been assessed for this survey, though lead researchers do report capturing menhaden.

b. Trip Level Report

Not applicable as we do not have any commercial fisheries for Atlantic menhaden operating in South Carolina waters.

c. Age/Length Data from Commercial Bait Harvest

Not applicable as not bait fishery operates in South Carolina waters.

d. Pound Net Fishery

Not applicable as there is no commercial pound net fishery operating in South Carolina waters.

V. Planned Management Programs for the Current Calendar Year

a. Management Changes

No significant changes in management programs are expected to take place in 2014 that would affect Atlantic menhaden management in South Carolina waters. Further, there are no FMP specific requirements on South Carolina with regards to Atlantic menhaden.

The only law that specifically applies to the harvest of menhaden is that which bans the use of purse seines in state waters.

b. Monitoring Program Changes

No significant changes in monitoring programs are expected to take place in 2014 that would affect the monitoring of Atlantic menhaden in South Carolina waters. As in previous years, South Carolina will collect routine commercial landings data as part of our cooperative statistics program and supply any relevant data to the NMFS and the ACCSP.

VI. Law Enforcement Reporting Requirements

Amendment 1 to the Interstate Fishery Management Plan for Atlantic menhaden requires all state programs to provide law enforcement capabilities adequate for successfully implementing the jurisdiction's Atlantic menhaden regulations. As such, the adequacy of a state's enforcement activity will be monitored annually by reports of the ASMFC Law Enforcement Committee to the Atlantic Menhaden Plan Review Team.

In compliance with this regulation, South Carolina, through its Department of Natural Resources coastal law enforcement branch, continues to work effectively in conjunction with federal agencies to implement the jurisdiction's Atlantic menhaden regulations.



MARK WILLIAMS
COMMISSIONER

A.G. 'SPUD' WOODWARD
DIRECTOR

March 13, 2014

Michael W. Waine
Fishery Management Plan Coordinator
Atlantic States Marine Fisheries Commission
1050 N. Highland Street, Suite 200A-N
Arlington, VA 22201

Mike:

The State of Georgia is submitting this letter in recognition of the April 1, 2014 deadline for submission of state compliance reports for the Interstate Fishery Management Plan for Atlantic Menhaden.

As a state with no directed commercial fisheries, without reduction processing capabilities, and no commercial landings of Atlantic menhaden, we respectfully request *de minimus* status for the State of Georgia.

Since 1976, the Georgia Department of Natural Resources (GADNR) has conducted monthly fishery-independent sampling using trawl nets along Georgia's coast. At the January 2014 Data Workshop for Atlantic menhaden, the Technical Committee decided to incorporate data collected by the Georgia Ecological Monitoring Trawl Survey into an abundance index in the upcoming 2014 benchmark stock assessment. No changes have been made to the monitoring program and all requested data have been submitted for inclusion.

As reported previously, the GADNR, Coastal Resources Division, will continue monitoring commercially harvested species through the ACCSP standardized trip ticket reporting system. If commercial landings of Atlantic menhaden do occur, Georgia will report them through this system.

Please contact me if you or the Management Board need further information.

Sincerely,

M. Todd Mathes
Coastal Resources Division

cc: -Spud Woodward
Doug Haymans
Pat Geer
Carolyn Belcher
Jim Page

ATLANTIC STATES MARINE FISHERIES COMMISSION
2013 Atlantic Menhaden Compliance Report

Date: March 26, 2014

To: Michael W. Waine

From: Behzad Mahmoudi, Research Scientist, FFWC
Justin Lerner, Biological Scientist, FWC

Subject: State of Florida Atlantic Menhaden Compliance Report

Two or more species enter the menhaden fishery along the east coast of Florida: Atlantic menhaden (*Brevoortia tyrannus*), yellowfin menhaden (*Brevoortia smithi*), and potentially other (hybrid) species. Commercial landings (directed and bycatch, all menhaden species combined) in 2013 amounted to 189,764.88 pounds.

I. Request for *de minimis*, where applicable.

a. The State of Florida officially requests *de minimis* status for Atlantic menhaden fishery in Florida. Florida east coast menhaden (directed and bycatch, all species combined) landings in 2013 amounted to 189,764.88 pounds, which constitutes less than 1% of the total Atlantic coast landings of Atlantic menhaden.

II. Previous calendar year's fishery

Directed Fishery

a. Report commercial landings by year and major gear type in a separate Excel spreadsheet for the entire landings time series. Indicate any overharvest of your state quota. **If these data are confidential, please put them in red font. These data will be taken out before releasing the report to the public.**

Menhaden landings in the directed fishery totaled 124,975 pounds in 2013. These landings exceeded the quota allotted to Florida, which may have been due to late or incomplete reporting at the time of monitoring. Cast nets represented the primary gear that accounted for 96% of the landings (See Table 1).

b. Include the official dated closure notice for directed commercial fisheries if the TAC (or percentage of TAC) was reached. Attach the official notice as an appendix and indicate the date and reason for closure here.

Florida's directed fishery for Atlantic menhaden was closed on August 28, 2013 because the quota was projected to be reached on that date (see attachment).

c. Indicate if your state participated in a quota transfer (include transaction details).

N/A

Bycatch Fishery

a. Report bycatch landings in the most detail possible (e.g., trip level information including gear type) in a separate excel spreadsheet. As a reminder, all bycatch landings that occur prior to the closure of the directed fisheries count towards the quota.

In 2013, there were 129 trips that harvested menhaden under the bycatch allowance after the fishery was closed on August 28. All menhaden reported as bycatch were caught via the use of cast nets. Menhaden landings reported under the bycatch allowance in 2013 totaled 64,789.88 pounds. See Table 1 for 2013 bycatch summary information.

b. Provide an analysis of trips harvesting under the bycatch allowance by gear type to analyze the effectiveness of a 6,000 pound bycatch allowance (use 1000 pound bins for trips). Contact me if you have questions about this analysis.

In 2013, 129 trips that harvested menhaden as bycatch after the closure. Of those, 119 trips harvested 1,000 pounds or less. Ten trips harvested between 1,100 and 2,000 pounds (see Table 2). Menhaden harvested as bycatch were caught exclusively with cast nets.

Episodic Event Set Aside

a. If your state participated in the set aside, report landings in the most detail possible (e.g., trip level information including gear type) in a separate excel spreadsheet.

N/A

III. Mandatory Monitoring Programs

a. Summarize reporting programs (e.g., frequency, harvester reporting, dealer reporting, data elements reported)

Commercial menhaden landings are reported via the Marine Fisheries Trip Ticket system. Reporting was monitored monthly until it was believed that 50% of the quota had been filled. At that time, weekly calls were made to dealers for the remainder of the season until the quota was projected to be reached.

b. Purse seine and bait seine vessels (or snapper rigs) must be required to submit trip level reports (e.g., Captain Daily Fishing Reports), indicate that requirement exists.

N/A

c. Age and length data from the commercial bait harvest. Indicate the number of age and length samples collected from your commercial bait fishery only.

i. One 10-fish sample (age and length) per 300 metric tons landed for bait purposes for ME, NH, MA, RI, CT, NY, NJ, DE

N/A

ii. One 10-fish sample (age and length) per 200 metric tons landed for bait purposes for MD, PRFC, VA, NC

N/A

Note – Amendment 2 recommends collecting the samples by gear type and defines each 10 fish sample as an independent sampling event; therefore, multiple 10-fish samples should not be collected from the same landing event. Report on how samples were collected.

d. Indicate that the following mandatory catch and effort data elements are being collected for the pound net fishery.

N/A

i. Total pounds (lbs) landed per day

ii. Number of pound nets fished per day

Note – In order to characterize selectivity of this gear in each state, a goal of collecting five 10-fish samples from pound net landings annually is recommended. Report on any samples collected.

IV. Planned management programs for the current calendar year

a. Summarize any changes from previous years. Only indicate deviations from your Amendment 2 implementation plans if any.

Since Florida's fishery is composed mostly by a castnet fishery, it was intended that no bycatch would be allowed after the quota was met and the fishery was closed. However, because of issues of non-reporting, the fishery was managed under the bycatch allowance after the fishery was closed. Interactions with fishermen resulted in reporting by individuals who had not previously reported. This resulted in some late reporting. Because of this late reporting the fishery was closed after the quota was met.

b. Summarize any significant changes to your monitoring programs. If the TC considered your state's fishery independent survey in the Data Workshop for Atlantic menhaden then you do not need to submit this information here. Indicate if any significant changes have occurred with your monitoring programs.

need to submit this information here. Indicate if any significant changes have occurred with your monitoring programs.

Florida is a de minimis state and is therefore exempt from this requirement.

V. Law Enforcement Reporting Requirements

Please include in this section any law enforcement issues that occurred in the previous calendar year. If nothing substantial happened, you may omit this section.

There were no law enforcement issues involving menhaden on the Atlantic coast of Florida for 2013.

Table 1. Summary of 2013 menhaden landings. [**Removed because of confidentiality**]

*Menhaden caught in traps were likely bycatch. However, since they were caught while the fishery was open they counted toward the quota and are included with the directed catch.

Table 2. Trip-level bycatch landings.

Pounds	0 - 1,000	1,001 - 2,000	2,001 - 3,000	3,001 - 4,000	4,001-5,000	5,001 - 6,000
Number of Trips	119	10	0	0	0	0

STATE OF FLORIDA
FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION

Order No. EO 13-29

**Directed Commercial Harvest of Atlantic Coast
Menhaden Prohibited**

The Fish and Wildlife Conservation Commission of the State of Florida, acting under the authority of Article IV, Section 9, of the Florida Constitution, and acting through its Executive Director under Delegations of Authority Paragraph 17 and Paragraph 22, hereby limits allowable commercial harvest of menhaden on the Atlantic coast north and east of the Miami-Dade/Monroe County line to menhaden harvested as bycatch in quantities equal to or less than 1,000 pounds per harvester per day. This action is taken in accordance with the Atlantic States Marine Fisheries Commission (ASMFC) Interstate Fishery Management Plan for Atlantic Menhaden (IFMP). The IFMP includes annual state-by-state commercial quotas for menhaden and Florida's fishery has exceeded its annual quota. The fishing season for the entire U.S. Atlantic coast runs from January 1 – December 31, each year, as established by the IFMP. This Executive Order amends and supersedes Executive Orders number 13-22 and 13-23. The authorized commercial harvest of menhaden for the remainder of the 2013 fishing year is limited as follows:


1. Beginning August ~~28~~²⁸, 2013 and continuing through December 31, 2013, the directed commercial harvest of menhaden harvested from state and federal waters of the Atlantic north and east of the Miami-Dade/Monroe County line is prohibited. Up to 1,000 pounds of menhaden harvested as bycatch from this region may be retained per person or per vessel, whichever is less, per day. No person may harvest more than 1,000 pounds of menhaden per day within or without state waters of the Atlantic north or east of the Miami-Dade/Monroe County line. No person may possess more than 1,000 pounds of menhaden in or on state or federal waters of the Atlantic north or east of the Miami-Dade/Monroe County line and no more than 1,000 pounds may be possessed aboard a vessel in or on those same waters. No person may sell more than 1,000 pounds of menhaden per day or purchase more than 1,000 pounds of menhaden per day from any individual or vessel north of the Miami-Dade/Monroe County line, except that any quantity of menhaden which has been previously landed and sold in compliance with all state regulations may be purchased and sold.
2. All other rules of the Commission relating to menhaden shall remain in effect.
3. This order shall take effect August ~~28~~²⁸th, 2013 and shall expire January 1, 2014.

Specific Authority: Article IV, Section 9, Florida Constitution

Law Implemented: Article IV, Section 9, Florida Constitution and 120.81(5), Florida Statutes

Given under my hand and seal of the Florida Fish and Wildlife Conservation Commission on this ~~28~~²⁸th day of August, 2013.

Attest:
Agency Clerk



Jo Ann Jain
Agency Clerk





Nick Wiley
Executive Director



Atlantic States Marine Fisheries Commission

1050 N. Highland Street • Suite 200A-N • Arlington, VA 22201
703.842.0740 • 703.842.0741 (fax) • www.asmf.org

MEMORANDUM

To: Atlantic Menhaden Management Board
From: Atlantic Menhaden Technical Committee
RE: Quarterly Update on 2014 Benchmark Stock Assessment Progress
Date: April 25, 2014

In preparation for the 2014 benchmark stock assessment, the Atlantic menhaden Technical Committee (TC) and Stock Assessment Subcommittee (SAS) have held seven joint webinars and four in-person meetings to date. This fifth progress report memorandum contains a summary from three webinars of the SAS that occurred since the last progress report on January 29, 2014 (M14-006). The primary goal of these webinars was to finalize data preparations and preliminary analyses in advance of the Assessment Workshop.

The SAS will continue to meet regularly via webinar throughout 2014 to ensure steady progress on data analysis and modeling tasks. Final decision-making with regard to data inclusion (from among those sources presented at the 2014 Data Workshop) and modeling approaches will be made at the 2014 Assessment Workshop. Consideration of any data analyses and alternative models submitted by the public will occur at the 2014 Assessment Workshop as well. Final review of the benchmark stock assessment by the TC will occur in the fall of 2014 following the June Assessment Workshop.

Below is a brief summary of topics discussed and progress made at each meeting since January 2014. A tentative timeline for the 2014 Atlantic menhaden workshops follows.

February 28, March 13, and April 16, 2014 in-person meeting summary:

- Finalized bait landings statistics and estimates of weight-at-age, maturity-at-age, fecundity-at-age, and growth.
- Reviewed tagging data analyses and discussed potential ways in which the data could inform assessment models.
- Finalized treatment of individual fishery-dependent and fishery-independent indices. Reviewed estimates of spatial extent of each survey. Discussed potential methods for developing regional and coastwide indices of abundance from individual surveys.
- Discussed options for natural mortality estimation using MSVPA, tagging, and life history estimates.
- Reviewed updates on assessment model development.

Tentative timeline for 2014 Atlantic menhaden benchmark stock assessment:

June 2-5, 2014 – Assessment Workshop

December 2014 – Peer Review Workshop (SEDAR)



STRIPED BASS HEALTH AND PRODUCTIVITY LINKED TO MENHADEN MANAGEMENT

Responding to historically low levels of Atlantic menhaden, the Atlantic States Marine Fisheries Commission (ASMFC) approved Amendment 2 of the Interstate Fishery Management Plan for Atlantic Menhaden in an attempt to prevent “overfishing”. In 2013, Amendment 2 established a total allowable catch (TAC) of 170,800 mT for the menhaden fishery, only 20% less than average landings from 2009 to 2011. Menhaden are the most important food source for many Atlantic coast fishes, birds and mammals and are essential to striped bass health. ASMFC implemented the TAC because **overfishing was found to be occurring**, not because of impacts and implications menhaden have on estuarine and marine ecosystems. A minimum size for menhaden should be established for the purse seine reduction fishery and TAC reduced until age 0 menhaden recruitment provides adequate prey to maintain the nutritional health of Chesapeake Bay striped bass and other menhaden predators. The Chesapeake Bay and Atlantic coast ecosystems could be more productive if the menhaden population was **ecologically sound**.

Since 2006, the Chesapeake Bay Ecological Foundation (CBEF) has conducted a year-round Predator/Prey Monitoring Program (partially funded by U.S. Fish & Wildlife Service and MD Department of Natural Resources), studying interactions of striped bass and their prey while monitoring diet, body fat, sex ratios and bacterial infections of more than 12,000 striped bass in Chesapeake Bay and mid-Atlantic coastal waters. CBEF determined that menhaden are **ecologically depleted** (insufficient numbers to provide adequate prey for dependent predators) in the Chesapeake Bay and along the mid-Atlantic coast. To advance **ecologically based fish management**, scientists from NOAA, MD and WV Universities, MD DNR and NMFS are testing bio-analytical methods and/or using observational body fat indices to promote the use of science-based **biological reference points** for monitoring the nutritional status of striped bass. The ASMFC and the Chesapeake Bay Program should conduct a Predator/Prey Monitoring Program, with support from NMFS, to help determine if the ecosystem is healthy and the menhaden population is ecologically sound - a primary goal of Amendment 2.

ASMFC has not resolved the problem of **ecological overfishing** (unsustainable harvest levels that disrupt the natural balance between predators and prey). Chronic overfishing by the purse seine reduction fishery has resulted in few menhaden (lifespan 10-12 yrs) surviving past age 3. Since the early 1990's, these young spawners have not produced enough age 0 menhaden, bay anchovy numbers have collapsed, and bottom dwelling species, including crustaceans, clams, worms and several fishes (crucial summer food for striped bass), have dramatically declined from loss of habitat and low oxygen levels at deeper depths in the Chesapeake Bay during summer months. Consequently, striped bass accumulate less body fat, internal mycobacterial infections and external lesions proliferate, growth rates slow and tagging studies show that natural mortality rates increased. At about 12" striped bass begin feeding on age 0 menhaden (approx. 3+"). Most striped bass caught in Chesapeake Bay are less than 24" and primarily consume ages 0&1 menhaden less than 10". From 2006-2011, the reduction fishery annually harvested an average of 400,000,000 age 1 menhaden (43% by number) in the Chesapeake Bay region. As the menhaden population declined, striped bass winter feeding grounds shifted from NC to VA and MD waters.

Since the early 1990's, a long-term decline of Chesapeake Bay and mid-Atlantic coast striped bass prey species (primarily menhaden, bay anchovy and blue crab) has destabilized these ecosystems. This **ecological catastrophe** coincides with overfishing of two prey species (Atlantic menhaden and blue crab). In Chesapeake Bay, depletion of young menhaden resulted in increased striped bass predation on blue crab, a valuable commercial and recreational species, as well as bay anchovy, spot and white perch. In mid-Atlantic coastal waters, striped bass that fed primarily on menhaden increased predation on over-wintering adult bay anchovies which spawn in the Chesapeake Bay. Subsequently, the adult bay anchovy population (essential prey for young predators) declined to historical lows. CBEF studies, MD DNR data and peer reviewed papers conclude that year-round, menhaden and bay anchovy are crucial prey fish for maintaining a large, nutritionally healthy population of striped bass in the Chesapeake Bay and mid-Atlantic coastal waters. Restoration of the Chesapeake Bay and mid-Atlantic coastal ecosystems requires implementation of ecologically based fish management. Progress demands innovative tools and techniques, and cooperation and communication between the fishery managers, scientists and stake holders. **Atlantic menhaden should be listed as a “Species of Concern” by NOAA’s National Marine Fisheries Service.**

CHESAPEAKE BAY ECOLOGICAL FOUNDATION, INC
11 Bay Street Suite 1B
Easton, MD 21601
410-822-4400
www.chesbay.org
chesbayorg@verizon.net



OLDER FEMALE STRIPED BASS DECLINING **RELEASE YOUNG FEMALE STRIPERS**

By: Jim Price

Managing striped bass in the Chesapeake Bay can be complicated when deciding size and creel limits because the productivity and health of the species needs to be considered. The first priority of our fishery managers should be to maintain sustainable populations of healthy fish. Chesapeake Bay Ecological Foundation (CBEF) is encouraging fishermen to voluntarily help protect the young female striped bass spawning stock since the number of adult migratory females over 28" has significantly declined. Recent research by CBEF has established that large numbers of young mature females under 28", re-entering the Chesapeake Bay to spawn, are being caught by the commercial gillnet fishery in Virginia's portion of the Bay during late winter-early spring.

Most immature female striped bass migrate to coastal waters before reaching 16". The Chesapeake Bay minimum size limit of 18" protects these females until they migrate to coastal waters, where a 28" minimum size limit protects them until they return to feed and spawn in the Chesapeake Bay. Fishermen could protect large numbers of mature, young females that spawn as late as early summer before returning to coastal waters, by releasing all striped bass 22"-28" through July 31st. Starting August 1st, fishermen could target all legal size (18" minimum) striped bass, since approximately 90% of those remaining in the Chesapeake Bay are males.

Over the past two decades, the natural mortality rate of striped bass in the Chesapeake Bay has been rising, and malnutrition and bacterial infections have increased during summer through early fall - a period of low prey abundance (primarily anchovy and blue crab). Historically, from fall through winter, striped bass approximately 16" and larger fed heavily (primarily on menhaden) and gained considerable weight. When menhaden were abundant, striped bass over 18" caught during late fall and winter, were typically healthy and in optimal condition. When judging the state of the Bay, the resurgence in numbers of striped bass has been cited as an indicator of improved conditions. However, the best indicator of an ecologically sound Chesapeake Bay would be striped bass and other predatory species remaining nutritionally healthy year-round.

STRIPED BASS HEALTH AND PRODUCTIVITY LINKED TO MENHADEN MANAGEMENT

CHESAPEAKE BAY ECOLOGICAL FOUNDATION CONDUCTS FIRST LONG-TERM YEAR-ROUND STUDY ON CHESAPEAKE BAY STRIPED BASS

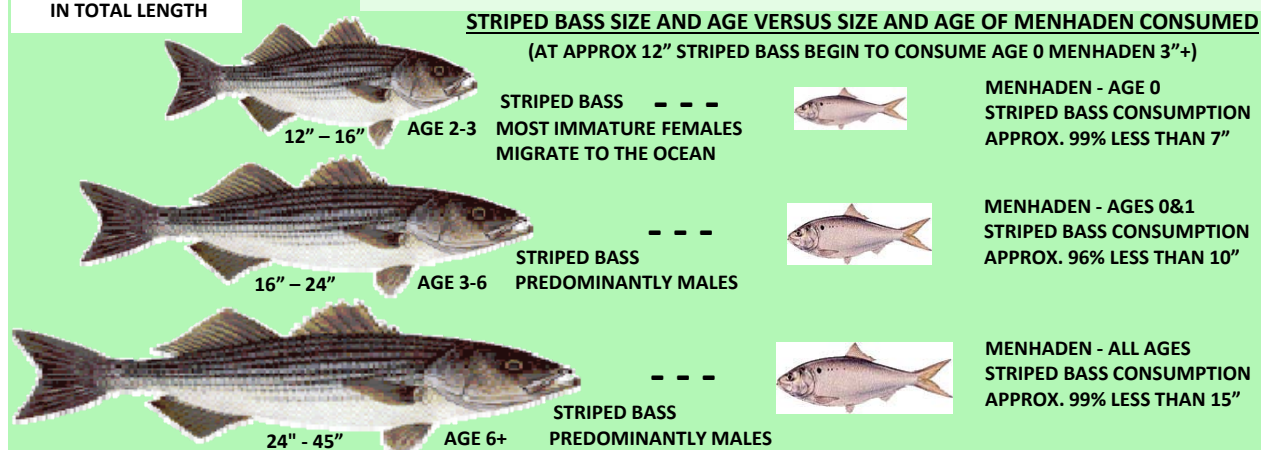
SINCE 2006, CHESAPEAKE BAY ECOLOGICAL FOUNDATION (CBEF) EXAMINED OVER 12,000 STRIPED BASS IN AN ONGOING STUDY TO MONITOR DIET, BODY FAT, SEX RATIOS, BACTERIAL INFECTIONS, REPRODUCTIVE STAGES & MIGRATIONS. IN 2013, ATTEMPTING TO PREVENT OVERFISHING, ATLANTIC STATES MARINE FISHERIES COMMISSION (ASMFC) ESTABLISHED A MENHADEN TOTAL ALLOWABLE CATCH (TAC) OF 170,800 mt.

CHESAPEAKE BAY: Since the early 1990's *ecological overfishing* (unsustainable harvest levels that disrupt the natural balance between predators and prey) of Atlantic menhaden has depleted the food supply in the Chesapeake Bay and lowered the carrying capacity of seabirds and fishes, including striped bass (major menhaden predator). Due to chronic overfishing of the spawning stock, age 0 menhaden became *ecologically depleted* (insufficient numbers to provide adequate prey for dependent predators) in the Chesapeake Bay. After spending most of their first year in the Bay, young menhaden (age 0) migrate down the Bay and south along the Atlantic coast. During the following spring thru fall, many 1 year old menhaden return to the Chesapeake Bay area. In some years during their return migration, over 400,000,000 1 year olds less than 10" are caught in Virginia's section of the Bay and nearby coastal waters by the menhaden purse seine reduction fishery (large scale harvest of menhaden for processing into fish oil and meal). Due to loss of habitat and low oxygen levels, bottom dwelling prey species in Chesapeake Bay, have dramatically declined. Consequently, Chesapeake Bay striped bass accumulate less body fat, mycobacterial infections and external lesions proliferated, growth rates slowed, *natural mortality rates increased* and predation increased on blue crab, a valuable commercial and recreational species, as well as bay anchovy, spot and white perch.

ALL MEASUREMENTS
IN TOTAL LENGTH

AGE AT MATURITY: MOST MALE STRIPED BASS AGE 2 - 3 / MOST FEMALE STRIPED BASS AGE 5 - 7 / MOST MENHADEN AGE 2 - 3

STRIPED BASS SIZE AND AGE VERSUS SIZE AND AGE OF MENHADEN CONSUMED (AT APPROX 12" STRIPED BASS BEGIN TO CONSUME AGE 0 MENHADEN 3"+)

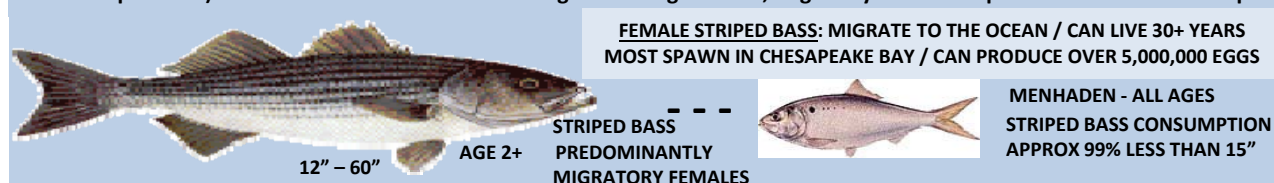


MENHADEN - CHESAPEAKE BAY AREA 2007 DATA - NMFS BEAUFORT, NC / 2009 DATA - CBEF*		
AGE	MEAN - INCHES	MEAN WT. - OZ.
* 0	*5.0	*0.7
1	8.6	4.3
2	10.0	6.7
3	12.2	11.9
4	12.8	13.2
5	13.5	16.1

ASMFC has not established a minimum menhaden size. Since the intensive menhaden reduction fishery targets ages 1 & 2, few menhaden survive past spawning age (2+). Menhaden can constitute over 75% of the striped bass diet (by weight) and are essential for their nutritional health.

LARGEST DOCUMENTED STRIPED BASS (84 LBS.) CAUGHT BY MD DNR IN CHESAPEAKE BAY 1985 / LARGEST DOCUMENTED MENHADEN (17") FOUND BY CBEF IN MALE STRIPED BASS (32") FROM CHESAPEAKE BAY 2006

ATLANTIC OCEAN: From 1988 to 1993 overfishing in the Gulf of Maine depleted the older, most prolific menhaden. Concurrently, pre-spawning menhaden were being intensively fished in the Chesapeake Bay and in Virginia and N. Carolina coastal waters. This overfishing lowered the carrying capacity of fishes, birds and mammals that prey on menhaden. Winter feeding grounds of large migratory striped bass shifted from NC to VA and MD waters as the menhaden population declined and their distribution contracted. Striped bass that historically fed on menhaden increased predation in ocean waters on over-wintering adult bay anchovy which spawn in the Chesapeake Bay. Subsequently, the bay anchovy population (crucial prey for small striped bass) declined to historical lows. During fall through winter, migratory female striped bass enter the Chesapeake Bay and compete with resident striped bass for limited prey.



MENHADEN-RECORD MEASUREMENT (NMFS)		
AGE	LENGTH	WEIGHT
12 YEARS	20"	54 OZ.

AGE 3 MENHADEN PRODUCE APPROXIMATELY 100,000 EGGS AND AGE 7+ MENHADEN CAN PRODUCE OVER 1,000,000 EGGS

LONG-TERM DECLINE OF STRIPED BASS PREY SPECIES (PRIMARILY MENHADEN, BAY ANCHOVY & BLUE CRAB) DESTABILIZED CHESAPEAKE BAY AND MID-ATLANTIC COAST ECOSYSTEMS (ECOLOGICAL CATASTROPHE). A MENHADEN MINIMUM SIZE SHOULD BE ESTABLISHED FOR THE PURSE SEINE REDUCTION FISHERY AND THE "TAC" REDUCED UNTIL AGE 0 MENHADEN RECRUITMENT PROVIDES ADEQUATE PREY TO MAINTAIN HEALTH OF CHESAPEAKE BAY STRIPED BASS. ASMFC AND THE CHESAPEAKE BAY PROGRAM SHOULD CONDUCT A PREDATOR/PREY MONITORING PROGRAM AND IMPLEMENT ECOLOGICALLY BASED FISH MANAGEMENT. THIS GOAL REQUIRES THE FORMULATION OF BIOLOGICAL REFERENCE POINTS FOR INDICATING THE NUTRITIONAL CONDITION OF INDIVIDUAL STRIPED BASS AS MEASURED BY MUSCLE-MOISTURE METERS AND/OR OBSERVED BODY FAT. HEALTHY STRIPED BASS WOULD INDICATE THE MENHADEN POPULATION IS ECOLOGICALLY SOUND. ATLANTIC MENHADEN SHOULD BE LISTED AS A "SPECIES OF CONCERN".